

**Notice of Determination****Appendix D****To:**☒ Office of Planning and Research

For U.S. Mail:

P.O. Box 3044

Sacramento, CA 95812-3044

Street Address:

1400 Tenth St.

Sacramento, CA 95814

☐ County Clerk

County of: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_**From:**Public Agency: California Department of Water ResourcesAddress: Division of Safety of Dams2200 X Street Sacramento, CA 95818Contact: Mr. Richard OlebePhone: (916) 227-0533

Lead Agency (if different from above):

Same as above

Address: \_\_\_\_\_

Contact: \_\_\_\_\_

Phone: \_\_\_\_\_

**SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.**State Clearinghouse Number (if submitted to State Clearinghouse): 2005091148Project Title: San Clemente Dam Seismic Safety ProjectProject Location (include county): Township: 17S Range: 2E Section: 24, Monterey County**Project Description:**

California-American Water Company, subject to review and final approval by the Department of Water Resources, Division of Safety of Dams, pursuant to its authority, plans to remove San Clemente Dam and reroute the Carmel River, as described in Alternative 3 of the final EIR-EIS. The primary purpose of the project is to protect public safety by alleviating dam safety issues associated with San Clemente Dam.

This is to advise that the California Department of Water Resources has approved the above described project on☒ Lead Agency or ☐ Responsible AgencyMarch 11, 2011

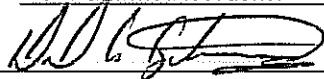
(Date)

and has made the following determinations regarding the above described project:

1. The project [☒ will ☐ will not] have a significant effect on the environment.
2. ☒ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.  
☐ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures [☒ were ☐ were not] made a condition of the approval of the project.
4. A mitigation reporting or monitoring plan [☒ was ☐ was not] adopted for this project.
5. A statement of Overriding Considerations [☒ was ☐ was not] adopted for this project.
6. Findings [☒ were ☐ were not] made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval, or the negative Declaration, is available to the General Public at: See attached locations.

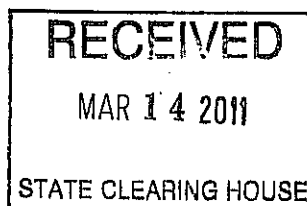
Signature (Public Agency) \_\_\_\_\_

Title Chief, Division of Safety of Dams

Date

3/11/11

Date Received for filing at OPR \_\_\_\_\_



**Locations where the final EIR/EIS with comments and responses, and record of project approval are available to the general public:**

California Department of Water Resources  
Division of Safety of Dams  
2200 X Street, Sacramento, CA 95818

California American Water, Central Division  
511 Forest Lodge Road Suite 100  
Pacific Grove, CA 93950



State of California—The Resources Agency  
DEPARTMENT OF FISH AND GAME

# 2011 ENVIRONMENTAL FILING FEE CASH RECEIPT

VH 55113482

V#417540896

RECEIPT# 412024

STATE CLEARING HOUSE # (if applicable)

SEE INSTRUCTIONS ON REVERSE. TYPE OR PRINT CLEARLY

LEAD AGENCY CA Dept. of Water Resources		DATE 3-14-11
COUNTY/STATE AGENCY OF FILING Same		DOCUMENT NUMBER 2005091148
PROJECT TITLE San Clemente Dam Seismic Safety Project		
PROJECT APPLICANT NAME Richard Olebe		PHONE NUMBER 227 (916) 0533
PROJECT APPLICANT ADDRESS 2200 X Street	CITY Sacramento	STATE CA
		ZIP CODE 95818

PROJECT APPLICANT (Check appropriate box):

- ☐ Local Public Agency
 ☐ School District
 ☐ Other Special District
 ☒ State Agency
 ☐ Private Entity

## CHECK APPLICABLE FEES:

- |   |            |             |
|---|------------|-------------|
| <input checked="" type="checkbox"/> Environmental Impact Report (EIR)                               | \$2,839.25 | \$ 2,839.25 |
| <input type="checkbox"/> Mitigated/Negative Declaration (ND)(MND)                                   | \$2,044.00 | \$          |
| <input type="checkbox"/> Application Fee Water Diversion (State Water Resources Control Board Only) | \$850.00   | \$          |
| <input type="checkbox"/> Projects Subject to Certified Regulatory Programs (CRP)                    | \$965.50   | \$          |
| <input type="checkbox"/> County Administrative Fee  | \$50.00    | \$          |
| <input type="checkbox"/> Project that is exempt from fees   |            |             |
| <input type="checkbox"/> Notice of Exemption  |            |             |
| <input type="checkbox"/> DFG No Effect Determination (Form Attached)                                |            |             |
| <input type="checkbox"/> Other  |            | \$          |

## PAYMENT METHOD:

- ☐ Cash
 ☐ Credit
 ☒ Check
 ☐ Other

TOTAL RECEIVED \$ 2,839.25

SIGNATURE [Signature]	TITLE Admin
--------------------------	----------------

WHITE - PROJECT APPLICANT

YELLOW - DFG/ASB

PINK - LEAD AGENCY

GOLDEN ROD - COUNTY CLERK

FG 753.5a (Rev. 11/10)

**Exhibit B****San Clemente Dam Seismic Safety Project  
California State Clearinghouse #2005091148****Findings on Environmental Impacts**

The Department of Water Resources (DWR), acting as a lead agency, makes the following findings in response to the potentially significant effects on the environment identified and analyzed in the Final Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the San Clemente Dam Seismic Safety Project. DWR is the lead agency because the Division of Safety of Dams, which has jurisdiction over applications to repair, alter, or remove a dam, and which has determined that the San Clemente Dam must be brought into compliance to withstand loading from a Maximum Credible Earthquake on nearby faults and to safely pass the Probable Maximum Flood, is the state agency with the greatest responsibility for supervising or approving the project as a whole.

Findings for impacts that will be rendered less than significant with mitigation are discussed in Part IA. Impacts that cannot be reduced to a less than significant level are discussed in Part IB. Table 1 lists impacts in the order in which they are discussed in the EIR/EIS, and indicates where they are discussed in the findings. Findings regarding alternatives to the project are contained in Part II. Discussions of the environmental impacts and mitigation measures contained in these findings paraphrase language contained in the final EIR/EIS (the language of the final EIR/EIS governs).

A Statement of Overriding Considerations for significant and unavoidable impacts is contained in Exhibit C. The specific mitigation measures that are within the responsibility and jurisdiction of the Department are also included in the Mitigation, Monitoring and Reporting Program (MMRP) found in Exhibit D. Implementation of this MMRP shall be accomplished by the Project Proponent (CAW) and its agents.

**TABLE 1.**

<b>Impact Issue</b>	<b>Impact Determination</b>	<b>Page Number</b>
<b>Section 4.1 Geology and Soils</b>		
GS-2	less than significant with mitigation	4
GS-4	less than significant with mitigation	4
GS-5	less than significant with mitigation	4
<b>Section 4.2 Hydrology and Water Resources</b>		
WR-2a	significant and unavoidable even with mitigation	16
WR-2b	significant and unavoidable even with mitigation	16
WR-3b	less than significant with mitigation	5
WR-4b	significant and unavoidable, cannot be mitigated	16
WR-7	less than significant with mitigation	5
<b>Section 4.3 Water Quality</b>		
WQ-1	less than significant with mitigation	5
WQ-2	less than significant with mitigation	5
WQ-3	less than significant with mitigation	6
WQ-5	less than significant with mitigation	6
WQ-6	less than significant with mitigation	6
WQ-7	less than significant with mitigation	7

Impact Issue	Impact Determination	Page Number
WQ-8	less than significant with mitigation	7
WQ-9	significant and unavoidable even with mitigation	17
WQ-10	significant and unavoidable, cannot be mitigated	17
WQ-12	less than significant with mitigation	7
WQ-14	less than significant with mitigation	8
WQ-16	less than significant with mitigation	8
WQ-17	less than significant with mitigation	8
<b>Section 4.4 Fisheries</b>		
FI-1	less than significant with mitigation	8
FI-2	significant and unavoidable even with mitigation	17
FI-4	significant and unavoidable even with mitigation	18
FI-5	significant and unavoidable even with mitigation	18
FI-6	less than significant with mitigation	9
FI-10	less than significant with mitigation	9
FI-13	significant and unavoidable, cannot be mitigated	18
FI-15	less than significant with mitigation	9
<b>Section 4.5 Vegetation and Wildlife</b>		
VE-1	less than significant with mitigation	10
VE-2	less than significant with mitigation	10
VE-3	less than significant with mitigation	10
VE-4	less than significant with mitigation	10
WI-2	less than significant with mitigation	11
WI-3	significant and unavoidable even with mitigation	19
WI-4	less than significant with mitigation	11
WI-8	less than significant with mitigation	12
WI-9	less than significant with mitigation	12
WI-10	significant and unavoidable even with mitigation	19
WI-11	significant and unavoidable even with mitigation	19
WI-13	significant and unavoidable even with mitigation	20
<b>Section 4.6 Wetlands</b>		
WET-1	less than significant with mitigation	12
WET-2	less than significant with mitigation	13
WET-3	less than significant with mitigation	13
<b>Section 4.7 Air Quality</b>		
AQ-1	significant and unavoidable even with mitigation	20
AQ-2	significant and unavoidable even with mitigation	20
AQ-3	significant and unavoidable even with mitigation	20
<b>Section 4.8 Noise</b>		
NO-1	significant and unavoidable even with mitigation	21
NO-2	significant and unavoidable even with mitigation	21
NO-3	significant and unavoidable even with mitigation	21

Impact Issue	Impact Determination	Page Number
<b>Section 4.9 Traffic and Circulation</b>		
TC-1	significant and unavoidable even with mitigation	21
TC-3a	less than significant with mitigation	13
TC-3b	significant and unavoidable even with mitigation	22
TC-4	less than significant with mitigation	14
TC-6	significant and unavoidable even with mitigation	22
TC-7	less than significant with mitigation	14
<b>Section 4.10 Cultural Resources</b>		
CR-1	less than significant with mitigation	14
CR-2	less than significant with mitigation	14
CR-3	less than significant with mitigation	15
CR-4	significant and unavoidable even with mitigation	22
CR-5	significant and unavoidable even with mitigation	22
CR-6	significant and unavoidable even with mitigation	23
<b>Section 4.12 Recreation</b>		
REC-2	significant and unavoidable even with mitigation	23

The San Clemente Dam Seismic Safety Project final EIR/EIS is comprised of the Draft EIR/EIS (DEIR/EIS), the Final EIR/EIS (FEIR/EIS) and related appendices. The final EIR/EIS includes a list of persons, organizations and public agencies that commented on the DEIR/EIS, comments and recommendations received on the DEIR/EIS either verbatim or in summary, and the Department's responses to significant environmental points raised in the review and consultation process.

The custodian and location of the final EIR/EIS and other documents or other materials which constitute the record of the proceedings is:

California Department of Water Resources  
Division of Safety of Dams  
2200 X Street  
Sacramento, CA 95818

## PART IA

### Potentially Significant Impacts Reduced to a Less Than Significant Level by Mitigation Measures Incorporated into the Carmel River Reroute and Dam Removal Project

#### 4.1 GEOLOGY AND SOILS

##### **GS-2: Access Route Landslides/Slope Stability**

Landslides could be triggered during the construction or operation of the project by oversteepening hillsides during the improvement of access routes. These improvements may require notching into adjacent hillside slopes, which could increase susceptibility to a landslide. (See Section 4.1, page 4.1-17, the Proponent's Proposed Project discussion on pages 4.1-12 and 4.1-13, and Appendix K).

**Finding:** Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure GS-2 requiring that the Project Proponent conduct route surveys, comply with design specifications required in the SWPPP, and to implement additional BMPs identified during the design phase.

##### **GS-4: Soil Erosion**

Blasting of canyon walls at select locations adjacent to the low and high roads would be required to widen roadways for equipment access. Road improvements immediately upslope of the river or where vegetation may be removed to accommodate road widening or new road construction could cause localized changes in drainage patterns which could result in erosion and introduction of sediment or rock into the stream channel. Construction along steep hillslopes and banks adjacent to watercourses could affect water quality by increasing turbidity or by introducing foreign material and construction debris. Road construction activities could alter drainage patterns, initiate slope instability, accelerate erosion, and discharge sediment to stream channels. (See Section 4.1, page 4.1-17, the Alternative 1 discussion on pages 4.1-15, and 4.1-16, and Appendix K).

**Finding:** Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure GS-4 requiring the implementation of standard erosion control methods and BMPs on both the upslope and downslope sides of all construction zones. BMPs would be customized to address site-specific conditions encountered on the steep slopes that adjoin the river. Erosion control measures included in the SWPPP (Appendix K) will be implemented.

##### **GS-5: Bypass Rock Removal by Blasting**

Blasting will alter the landscape by removing approximately 145 acre-feet of rock in a 450-foot-long channel between the Carmel River and San Clemente Creek, approximately 2,500 feet upstream of the SCD. Blasting entails safety hazards including the potential to trigger landslides on adjacent unstable slopes. (See section 4.1, pages 4.1-17 and 4.1-18, and Appendix K).

**Finding:** Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure GS-5 requiring that a blasting plan be prepared as part of final design for construction that will summarize BMPs to be employed during all blasting

activities to ensure safety and minimize potential damage from an associated landslide. The applicant will require the contractor to submit BMPs that meet measures specified in the SWPPP (Appendix K).

#### **4.2 HYDROLOGY AND WATER RESOURCES**

##### **WR-3b: Increased Sediment Deposition that Obstructs Fish Passage**

Potential for blockage of fish passage would occur from sediment deposition in the channel and at the diversion dike. Fish would have to traverse the bypass channel and the dike to move from the San Clemente Creek arm to the Carmel River arm. The bypass channel and the San Clemente Creek channel would be steep (2.9 percent) relative to the current channel through the stored sediment (2.5 percent). (See Section 4.2, page 4.2-81).

**Finding:** Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure WR-3b requiring that both the reconstructed channel and the new bypass channel be designed to allow fish passage. The design would include runs and pools that reflect a geomorphically stable channel and the passage requirements for the fish.

##### **WR-7: Impact to the Location or Timing of Water Supply Diversions**

The existing CAW point of diversion will be replaced at an elevation of 525 ft. in the immediate vicinity of San Clemente Reservoir, which could affect fish passage. (See Section 4.2, page 4.2-78, and the Alternative 1 discussion on page 4.2-68).

**Finding:** Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure WR-7 requiring the diversion to be operated to maintain fish passage flows in Carmel River in January through May while also providing the necessary water supply to the downstream community. Any other necessary mitigation for a change in a point of diversion would be addressed by the SWRCB during in the permit process.

#### **4.3 WATER QUALITY**

##### **WQ-1: Road Construction and Improvement Activities**

Road improvements immediately upslope of the river or where vegetation may be removed to accommodate road widening or new road construction could cause localized changes in drainage patterns, which could cause slope instability, accelerate erosion, and introduce excess sediments to the stream channel. Road construction and improvements along the steep hillslopes and banks adjacent to the river could affect water quality by increasing turbidity. (See Section 4.3, page 4.3-47, the Proponent's Proposed Project discussion on 4.3-33, and Appendix K).

**Finding:** Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure WQ-1 requiring the implementation of erosion control methods, BMPs, and associated water quality monitoring measures in the SWPPP (Appendix K).



## **WQ-2: Instream, Streambank, and/or Stream Margin Construction Activities**

Construction activities and use of machinery, equipment and workers in the streambed or in vicinity of a stream, may cause erosion of the streambank and soils of the stream margins, deposition of rock debris in the stream, and increased turbidity. (See Section 4.3, page 4.3-47, the Proponent's Proposed Project discussion on pages 4.3-33 and 4.3-34, and Appendix K).

**Finding:** Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure WQ-2 requiring implementation of erosion control measures identified in the SWPPP (Appendix K). The SWPPP may be modified during consultation with the CCRWQCB and other permitting agencies to include additional provisions to prevent impacts due to erosion and sediment input to protect streams from construction/deconstruction activities.

## **WQ-3: Accidental Leaks and Spills of Toxic Substances**

Accidental leaks and spills of chemicals or fluids from equipment and machinery, wet concrete, concrete leachate or particulates, or demolition debris in the construction area could release toxic substances to surface water, or to soil areas within the margins of the active channel. This would potentially violate water quality standards or impact aquatic resources. (See Section 4.3, page 4.3-47, the Proponent's Proposed Project discussion on pages 4.3-34 and 4.3-35, and Appendix K and Appendix R).

**Finding:** Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure WQ-3 requiring implementation of BMPs identified in the SWPPP (Appendix K) and the Spill Prevention, Containment, and Countermeasure Plan (SPCC, Appendix R).

## **WQ-5: Stream Diversions Ponded Areas**

Installation of sheetpile barriers or a check dam would create a ponded area with increased water temperature and turbidity, and decreased dissolved oxygen. Water discharged downstream of the construction area could have increased temperature and turbidity, and decreased dissolved oxygen. (See Section 4.3, page 4.3-47, the Proponent's Proposed Project discussion on pages 4.3-36 and 4.3-37, and Appendix K).

**Finding:** Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure WQ-5 requiring implementation of measures contained in the SWPPP (Appendix K) to minimize heating of the diverted water around the construction site. Measures include monitoring stream temperatures, dissolved oxygen, and turbidity downstream of SCD during construction. Criteria for maximum water temperatures, minimum dissolved oxygen, and maximum turbidity will be based on steelhead requirements. If water temperatures exceed the criteria, the bypass flow will be mixed with cooler water from the upstream well point field to reduce temperatures to an acceptable level.

## **WQ-6: Stream Diversions Return of Bypassed Flows**

Bypassed stream flows would be discharged back into the stream below the active construction area and could cause localized scour, sedimentation and turbidity effects. (See Section 4.3, page 4.3-47, and the Proponent's Proposed Project discussion on page 4.3-37).

**Finding:** Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure WQ-6 requiring installation of energy dissipation structures in the areas where bypassed project waters are discharged.

#### **WQ-7: Rewatering After Stream Diversions**

Following completion of construction activities, streamflow would be returned to the previously dewatered area. Water quality standards could be violated if fine sediments and toxic materials settled in the dewatered area during construction. (See Section 4.3, page 4.3-47, the Proponent's Proposed Project discussion on page 4.3-37, and Appendix K).

**Finding:** Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure WQ-7 requiring implementation of appropriate BMPs identified in the SWPPP (Appendix K) such as use of a filter cloth or other fabric barrier placed on the ground surface of the active construction area to catch fine sediments, cement dust, or other materials used or spilled during construction activities. All sand-size and finer construction fill, and any angular crushed rock will be disposed of at an appropriate off-site location.

#### **WQ-8: Discharge from Settling Basins**

Temporary settling basins would be constructed below the plunge pool, at the Old Carmel River Dam (OCD) bridge, and in the reservoir near the 494-foot elevation intake. Water ponded in settling basins would have increased temperature, decreased dissolved oxygen, and increased turbidity. This water may be discharged, or leak around the bottom or edges of the settling basin into downstream waters, resulting in degradation of water quality. (See Section 4.3, page 4.3-47, the Proponent's Proposed Project discussion on page 4.3-38, and Appendix K).

**Finding:** Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure WQ-8 requiring implementation of BMPs identified in the SWPPP (Appendix K) including use of settling basins and a sedimentation tank/holding facility located above the ordinary high water zone that allows only clear water to be returned to the stream. Settled solids would be disposed of at an appropriate off-site location. If effluent water quality does not meet water quality criteria, discharge would be discontinued until acceptable conditions are met. Additional water filtration may be implemented.

#### **WQ-12: OCD Notching**

The release or deposition of concrete particles in surface waters while notching the OCD could violate water quality standards or impact aquatic resources. (See Section 4.3, page 4.3-47, the Proponent's Proposed Project discussion on page 4.3-40, and Appendix K).

**Finding:** Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure WQ-12 requiring implementation of appropriate BMPs and associated water quality monitoring identified in the SWPPP (Appendix K).

#### **WQ-14: Dam-Related Construction or Demolition**

The release or deposition of concrete particles in surface waters during dam-related construction and demolition could violate water quality standards or impact aquatic resources. (Section 4.3, page 4.3-48, the Alternative 2 discussion on pages 4.3-46 and 4.3-47, and Appendix K).

**Finding:** Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure WQ-14 requiring implementation of appropriate BMPs incorporated in the SWPPP (Appendix K) such as placing blasting mats over the dam and concrete blocks to prevent flying concrete debris, and placing a fabric barrier on the ground surface in the active construction/demolition area to catch sediment and cement debris.

#### **WQ-16: Sediment Disposal**

Sediment could be entrained in the sediment disposal area during large or prolonged stormwater runoff events and discharged to the Carmel River, where it could increase turbidity. (See 4.3, page 4.3-49, and Appendix K).

**Finding:** Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure WQ-16 requiring implementation of appropriate erosion control BMPs identified in the SWPPP (Appendix K) and monitor effectiveness for a period of 10 years at the end of each rainy season, with additional monitoring conducted periodically during the rainy season to identify any imminent erosion problems.

#### **WQ-17: Construction of Diversion Channel and Diversion Dike**

Construction of the diversion channel and dike could cause the discharge of rock debris and the mobilization of fine sediments into San Clemente Creek and the Carmel River, resulting in elevated turbidity levels. (Section 4.3, pages 4.3-49 and 4.3-50, and Appendix K).

**Finding:** Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure WQ-17 requiring implementation of appropriate BMPs incorporated in the SWPPP (Appendix K). In addition, a blasting mat will be used to catch and direct flying rock debris to an area where it can be removed. This material would be disposed of at an appropriate on-site location in the Carmel River arm of the reservoir.

### **4.4 FISHERIES**

#### **FI-1: Access Route Improvements**

Road improvements along the Carmel River between the Sleepy Hollow Ford and OCRD would affect aquatic habitat through removal of riparian vegetation reducing shading and food resources. Short-term impacts may be caused by sedimentation and increased turbidity along the Carmel River from OCRD downstream to the Sleepy Hollow Ford. Road widening activities along the Carmel River would potentially expose rearing juvenile steelhead along about a third of Reach 4 to increases in suspended sediment. Reduction of riparian habitat would reduce the amount of shading along the river and reduce the source of terrestrial insects as a food resource for juvenile steelhead along Reach 4 of the Carmel River. (See Section 4.4, page 4.4-81, the Alternative 1 discussion on page 4.4-71, the Proponent's Proposed Project discussion on pages 4.4-53, 4.4-54, and 4.4-55, and Appendix U and Appendix K).

**Finding:** Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure FI-1 requiring implementation of BMPs for riparian vegetation, identified in the Botanical Resources Management Plan (Appendix U). Water quality will be protected during construction by implementing measures in the SWPPP (Appendix K). When construction is complete, revegetate stream margins with native species as described in Appendix U.

#### **FI-6: Water Quality Effects on Fish**

Construction activities, river diversions, and reservoir dewatering would affect turbidity, DO, and temperature in the river downstream of SCD during the summer low flow period. These effects may extend downstream for several miles. Turbidity levels would attenuate in a downstream direction with the most pronounced effects in Reach 4 attenuating to minor or undetectable effects in Reach 6. Collectively these three reaches support about 40 percent of the total steelhead in the river and about 30 percent of the rearing habitat in the Carmel River downstream of LPD. (See Section 4.4, page 4.4-81, and the Proponent's Proposed Project discussion on pages 4.4-59, 4.4-60, and 4.4-61).

**Finding:** Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure FI-6. This measure requires moderating the rate at which the reservoir is dewatered, aerating the water prior to release into the river, dewatering the reservoir during cool periods or during the early part of the day, limiting increase of river temperatures downstream of the SCD to no more than 1 to 2 degrees Celsius over water temperature levels upstream of the sheet-pile diversion, and reducing thermal loading in diversion pipes around the reservoir by placing the pipeline in shaded locations or by burying the pipe beneath a shallow layer of sand, covering the pipe with shade cloth or burlap, or by painting the pipe white. During bypass operations for the river, the water will be aerated as it descends from the SCD to the river. Water pumped from the reservoir or from well points will be discharged in a similar manner to fully aerate low DO water prior to discharge into the river.

#### **FI-10: Relocate CAW Water Diversion Upstream**

Relocating the water supply diversion intake 2,900 feet upstream on the Carmel River from the current dam site would reduce flow in the river between the diversion intake and the SCD site compared to existing conditions. (See Section 4.4, page 4.4-81, and the Alternative 1 discussion on pages 4.4-74 and 4.4-75).

**Finding:** Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure FI-10 requiring developing and complying with an MOU between Monterey Peninsula Water Management District (MPWMD), the California Department of Fish and Game (CDFG), the National Marine Fisheries Service (NMFS) and CAW to provide flows for steelhead habitat in the reach of the river affected by the new point of diversion.

#### **FI-15: Sleepy Hollow Steelhead Rearing Facility**

The Carmel River Reroute and Dam Removal alternative could result in poor quality water to the Sleepy Hollow Steelhead Rearing Facility (SHSRF) during project construction. (See Section 4.4, page 4.4-81, and the Proponent's Proposed Project discussion on pages 4.4-70 and 4.4-71).

**Finding:** Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure FI-15 requiring that water be pumped from the

Russell Wells and made available to the SHSRF as an alternative water supply during construction years, or during periods of excessive turbidity or sediment levels in the Carmel River.

#### **4.5 VEGETATION AND WILDLIFE**

##### **VE-1: Special-Status Plant Species**

Populations of special-status plant species are located in the project area and could be impacted by construction activities. (See Section 4.5, pages 4.5-59, and the Proponent's Proposed Project discussion on page 4.5-33).

**Finding:** Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure VE-1 requiring that, to the extent possible, populations of CNPS List 4 species will be avoided during construction activities.

##### **VE-2: Loss of Protected Oak Woodland**

Construction activities could result in loss of oak woodlands protected by the Monterey County Oak Protection Ordinance. (See Section 4.5, page 4.5-59, the Proponent's Proposed Project discussion on pages 4.5-33 and 4.5-34, and Appendix U).

**Finding:** Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure VE-2 requiring that impacts to oak trees be avoided by confining access improvement activity in the vicinity of the oak woodlands. Measures in the Botanical Resources Management Plan (Appendix U) will be finalized and implemented including elements from the Monterey County Oak Protection Ordinance.

##### **VE-3: Loss of Other Native Vegetation**

Project activities are expected to result in loss of native vegetation, including several types of sensitive riparian habitat and oak woodland habitat. (See Section 4.5, page 4.5-59, the Proponent's Proposed Project discussion on pages 4.5-34, 4.5-35, 4.5-37, and 4.5-38, and Appendix U).

**Finding:** Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure VE-3 requiring that the proposed access road improvements, laydown areas, plunge pool, and staging areas be designed to minimize loss of native vegetation. Unnecessary clearing of, or disturbance to, native vegetation outside of the road right-of-way will be avoided. Fencing will be used to prevent encroachment of vehicles or project activity into undisturbed native habitat or within the dripline of native trees outside of designated areas. Project outflows will be designed to diffuse water rather than allow it to flow out in a concentrated stream, and will be placed to minimize bank erosion. Supplemental irrigation will be provided to alders around the reservoir fringe when the reservoir is dewatered and to riparian vegetation above the bypass outflow. Measures in the Botanical Resources Management Plan (Appendix U) will be implemented.

##### **VE-4: Indirect Effects on Native Vegetation**

Project construction activities may result in indirect adverse impacts to vegetation, including increased erosion and sedimentation, damage to roots of oaks and other tree species adjacent to areas where heavy equipment would be operated, dust impacts to roadside vegetation, and colonization of exposed

substrate by exotic plant species. (See Section 4.5, page 4.5-59, the Proponent's Proposed Project discussion on pages 4.5-38 and 4.5-39, and Appendix U and Appendix K).

**Finding:** Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure VE-4 requiring that road widening be designed to avoid placing fill above canyon walls, and to avoid or minimize alterations of existing drainage patterns that could lead to increased erosion and sedimentation. Construction work will be scheduled to occur during the dry season. Standard erosion and sedimentation control BMPs will be implemented for all grading, filling, clearing of vegetation, or excavating that occurs in site preparation according to the Botanical Resources Management Plan (Appendix U) and SWPPP (Appendix K).

Excavation and operation of construction vehicles off of the right-of-way will be prohibited within the dripline of oak and other tree species. To minimize dust, unpaved access roads will be frequently watered. Any areas where existing vegetation cover is removed outside the roadway will be revegetated, according to the Botanical Resources Management Plan (Appendix U).

#### **WI-2: Removal of Ancillary Facilities**

Removing the valve house from the SCD and other structures near the dam may displace special-status bat species from traditional roosts and may increase mortality if the structures are removed when newborn or very young bats are present in the roosting colonies. (See section 4.5, page 4.5-59, the Alternative 1 discussion on page 4.5-52, the Proponent's Proposed Project discussion on pages 4.5-39 and 4.5-40, and Appendix V).

**Finding:** Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure WI-2 requiring that, if possible, structure removal would be scheduled after juvenile bats are weaned and capable of flight, as determined by a biologist with expertise in bat biology. A preconstruction survey will be conducted for bat roosts. If bats are observed nesting or roosting in the area, USFWS and CDFG will be notified. Mitigation measures previously agreed to by the agencies will be implemented. Protection measures set forth in Appendix V, Protection for Special Status Species, will be implemented.

#### **WI-4: Notching Old Carmel River Dam (OCD)**

Instream work during notching of the OCD could damage CRLF summer and spawning habitat downstream of the SCD. It could also affect western pond turtle, two-striped garter snake, foothill yellow-legged frog, and Coast Range newt habitat or individuals. (See Section 4.5, page 4.5-59, and the Proponent's Proposed Project discussion on page 4.5-43).

**Finding:** Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure WI-4 requiring that, prior to OCD notching, USFWS protocol-level surveys will be conducted for CRLF along the Carmel River up to one-half mile downstream of OCD. Surveys for other special-status aquatic species will be occur concurrently. If work on the ORCD is interrupted for more than two weeks, the surveys will be repeated if the initial surveys indicated the presence of special-status species habitat or populations.

**WI-8: Vegetation Removal and Construction-Related Disturbance**

Potential impacts to special-status birds from vegetation removal and other construction activities include disturbance to breeding individuals during the nesting season. Impacts could include loss of eggs or nestlings, displacement from increased noise and human presence in the vicinity of the construction activity, and a reduction in foraging habitat. (See Section 4.5, page 4.5-61, the Alternative 1 discussion on page 4.5-52, and the Proponent's Proposed Project discussion on page 4.5-48).

**Finding:** Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure WI-8 requiring that, to the extent possible, vegetation removal will be conducted between August 1 and March 1. If any vegetation removal is conducted between March 1 and August 1, pre-construction surveys for breeding birds would be conducted in these areas. Any active nests found will be isolated from construction activities by a species-specific buffer area (from 50 to 500 feet), USFWS and CDFG will be notified, and the nests will be avoided until the eggs are hatched and the nestlings fledged.

**WI-9: Pre-Existing Access Road Improvements**

Widening and improving the existing Jeep Trail could impact Monterey dusky-footed wood rat and other special-status wildlife species. Potential impacts to special-status birds include disturbance during the nesting season. Impacts could include loss of eggs or nestlings, displacement due to increased noise and human presence in the vicinity of the nests, and a reduction in foraging habitat. (Section 4.5, page 4.5-59, the Alternative 1 discussion on pages 4.5-52 and 4.5-53, and Appendix V).

**Finding:** Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure WI-9 requiring that tree and vegetation removal be restricted to the minimum amount necessary to allow access by construction vehicles. Pre-construction surveys of the Jeep Trail will be conducted by qualified wildlife biologists, to assess the presence or habitat use by any special-status wildlife species. In consultation with the USFWS and CDFG, BMPs included in the Protection Measures for Special Status Species Plan (Appendix V), will be finalized and implemented to avoid or reduce impacts to special-status wildlife species habitat or individuals.

**4.6 WETLANDS****WET-1: Permanent Loss of Wetlands and Other Waters of the U. S.**

Construction activities would result in the permanent loss of jurisdictional wetlands and Other Waters of the U.S. due to installation of the diversion dam and elimination of San Clemente Reservoir by removal of the SCD. (See section 4.6, page 4.6-14, the Proponent's Proposed Project discussion on pages 4.6-8 and 4.6-9, and Appendix U).

**Finding:** Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure WET-1 requiring implementation of measures in the Botanical Resources Management Plan (Appendix U), including provisions for restoration, mitigation, and monitoring for wetlands and Other Waters affected by the project. Riparian and fringe palustrine emergent wetlands similar in function to the lost acreage will be created or restored at a 3:1 ratio, grading will be conducted as necessary, and cuttings or seedlings will be placed in appropriate habitat under the supervision of a qualified botanist. Seedlings will be from Carmel Valley area populations. Replacement plantings will be monitored for at least five years. Seedlings will be replanted as necessary to ensure long-term survival. Impacts to Other Waters may be mitigated by stream channel improvements along

the Carmel River upstream of the Project Area, or along other streams in the watershed. The project proponent may either conduct this restoration work or provide funding to other property managers for projects that restore natural channel conditions. Restoration may be conducted at sites in lands along the Carmel River owned by the Project Proponent or on appropriate streams elsewhere in the watershed. Restoration sites will be coordinated with the USACE and CDFG and will be conserved in perpetuity.

#### **WET-2: Short-term Disturbance of Wetlands and Other Waters of the U.S.**

Construction activities would result in the temporary filling or dewatering of fringe palustrine emergent wetlands and Other Waters of the U.S. (See section 4.6, pages 4.6-14 and 4.6-15, the Proponent's Proposed Project discussion on pages 4.6-9 and 4.6-10, and Appendix U).

**Finding:** Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure WET-2 regarding the design of construction features and implementation of measures in the Botanical Resources Management Plan.

#### **WET-3: Indirect Impacts to Wetlands and Other Waters of the U.S.**

Construction activities that accelerate erosion and sedimentation could have indirect impacts on jurisdictional wetlands and Other Waters of the U.S. (See section 4.6, page 4.6-15, the Proponent's Proposed Project discussion on pages 4.6-10 and 4.6-11, and Appendix U and Appendix K).

**Finding:** Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure WET-3 requiring that road improvements be designed to avoid placing fill above canyon walls, and to avoid or minimize alterations of existing drainage patterns that could lead to increased erosion and sedimentation. Construction work will be scheduled to occur during the dry season. Standard erosion and sedimentation control BMPs will be implemented for all grading, filling, clearing of vegetation, or excavating that occurs in site preparation according to the Botanical Resources Management Plan (Appendix U) and SWPPP (Appendix K). Areas where existing vegetation is removed outside of the roadway will be revegetated, according to the Botanical Resources Management Plan (Appendix U).

### **4.9 TRAFFIC AND CIRCULATION**

#### **TC-3a: Traffic Safety Carmel Valley Road**

The project would add construction traffic to a segment of Carmel Valley Road east of Carmel Village, which currently experiences relatively high accident rates. Cachagua Road would be used to transport aggregate to the project site for improvements to dam access roads. This segment of Cachagua Road also has an accident rate that exceeds the expected rate. Construction traffic on these roads could increase accident rates. (See Section 4.9, page 4.9-46, the Alternative 1 discussion on pages 4.9-34 and 4.9-35, and the Proponent's Proposed Project discussion on pages 4.9-23 and 4.9-24).

**Finding:** Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure TC-3a requiring implementation of a trip reduction plan, a traffic coordination and communication plan, a traffic safety plan, and to pay for additional enforcement.



#### **TC-4: Inadequate Corner Sight Distances**

The corner sight distances looking to the east from the Cachagua Road approach to Carmel Valley Road, looking to the north from the Jeep Trail approach to Cachagua Road, and looking north from the Cachagua Road intersection with the Jeep Trail are inadequate. Construction traffic in these areas will impact safety. (See Section 4.9, page 4.9-46, and the Alternative 1 discussion on page 4.9-39).

**Finding:** Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure TC-4 requiring the applicant to construct improvements at the Carmel Valley Road/Cachagua Road intersection to increase the sight distance provided for a motorist looking to the east from the Cachagua Road approach. The applicant will relocate the stop bar on the Cachagua Road approach to Carmel Valley Road to lengthen the sight distance looking to the east. Physical improvements will be required at the intersection to improve the sight distance. The applicant will construct improvements at the Cachagua Road/Jeep Trail intersection to increase the sight distance provided for a motorist looking to the north from the Jeep Trail approach.

#### **TC-7: Pavement Loadings**

Project construction would cause pavement loading impacts. (See Section 4.9, page 4.9-46, and the Alternative 1 discussion on pages 4.9-40 and 4.9-41).

**Finding:** Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure TC-7 requiring that the applicant coordinate with local agencies to determine whether the proposed routes for truck travel are appropriate before beginning construction. The applicant will repair any damage to Carmel Valley Road east of Carmel Village and to Cachagua Road between Carmel Valley Road and the Jeep Trail, and will restore them to pre-project conditions immediately after construction has been completed.

### **4.10 CULTURAL RESOURCES**

#### **CR-1: Ground Disturbance**

Construction activities and ground disturbance could damage or destroy archaeological resources. (See Section 4.10, page 4.10-27, and the Proponent's Proposed Project discussion on pages 4.10-17, 4.10-21, and 4.10-22).

**Finding:** Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure CR-1 requiring the applicant to complete the Section 106 process, prepare a MOA, and conduct archaeological monitoring during clearing and grubbing of the site and during any subsurface excavation prior to disposal activities. Activities involving the "saddle" (the peninsula of land bordered to the east, north and west by the reservoir) could damage or destroy buried deposits in CA-MNT-1253 (BRM features) (AR-4), which has not been tested. If the site is eligible for the NRHP, it will be avoided. If avoidance is not possible, the SHPO will be contacted. Data recovery of the site may be required.

#### **CR-2: Damage to Historic Structures from Construction-related Vibration**

Construction activities could cause vibrations that could damage historic structures. (See Section 4.10, page 4.10-26, and the Proponent's Proposed Project discussion on page 4.10-22).

## Exhibit 4: Notice of Determination, Including Exhibit B, Exhibit C and Exhibit D

**Finding:** Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure CR-2 requiring that rigid support of excavation structures be used to minimize movement of the ground.

**CR-3: Introduction of Short-term Dirt/Unintended Damage**

Construction activities would cause accumulation of dirt on historic properties. (See Section 4.10, page 4.10-26, and the Proponent's Proposed Project discussion on pages 4.10-22 and 4.10-23).

**Finding:** Changes or alterations have been required in, or incorporated into the project that avoid or substantially lessen the significant environmental effect as identified in the final EIR/EIS. The impact is substantially lessened by adoption of Mitigation Measure CR-3 requiring that dust associated with construction activities will be reduced by spraying water on the ground surface prior to ground disturbance.

## PART IB

### **Potentially Significant Impacts that Cannot be Reduced to a Less than Significant Level by Mitigation Measures Incorporated into Alternative 3 (Carmel River Reroute and Dam Removal)**

#### **4.2 HYDROLOGY AND WATER RESOURCES**

##### **WR-2a: Changes in Sediment Flow Passing SCD Immediately After Construction**

Sediment stored behind SCD would be excavated and removed. After years of being submerged by water and sediment, the canyon walls would lack stabilizing vegetation. The residual sediment layer would be composed of sands up through gravels, along with cobbles and boulders that pre-date the reservoir. The fine gravel would rapidly wash off the hillsides in rain events and would be available for transport downstream. Because the SCD would be removed, the full annual sediment load plus a portion of the residual sediment remaining in the reservoir area would pass the SCD site to the lower river. (See Section 4.2, page 4.2-78, the Alternative 2 discussion on pages 4.2-69 and 4.2-70, and Appendix K and Appendix U).

**Finding:** The impact has been reduced by adoption of Mitigation Measure WR-2a which requires that, following sediment excavation, geomorphically stable channels will be designed and constructed through the reservoir to the confluence of the San Clemente Creek and Carmel River channels. These channels would have the necessary slope and dimensions to convey the flow and estimated sediment loads. A stream restoration plan will be prepared as part of final design for this alternative, and will include mitigation for the increase in sediment supply following construction. However, even with the mitigation discussed above, the short-term impact will remain significant and unavoidable.

##### **WR-2b: Changes in Sediment Storage and Composition in the Lower River During Construction**

Sediment stored behind SCD would be excavated and removed. After years of being submerged by water and sediment, the canyon walls would lack stabilizing vegetation. The residual sediment layer would be composed of sands up through gravels, along with cobbles and boulders that pre-date the reservoir. The fine gravel would rapidly wash off the hillsides in rain events and would be available for transport downstream. Because the SCD would be removed, the full annual sediment load plus a portion of the residual sediment remaining in the reservoir area would pass the SCD site to the lower river. (See Section 4.2, page 4.2-78, the Alternative 2 discussion on pages 4.2-69 and 4.2-70, and Appendix K and Appendix U).

**Finding:** The impact has been reduced by adoption of Mitigation Measure WR-2b which requires that following sediment excavation, geomorphically stable channels would be designed and constructed through the reservoir to the confluence of the San Clemente Creek and Carmel River channels. These channels would have the necessary slope and dimensions to convey the flow and estimated sediment loads. A stream restoration plan will be prepared as part of final design for this alternative, and will include mitigation for the increase in sediment supply following construction. However, even with the mitigation discussed above, the short-term impact will remain significant and unavoidable.

##### **WR-4b: Increase in Frequency of High Suspended Sediment Concentrations**

Sediment would be trapped in the reservoir area and the downstream suspended sediment concentration would exceed the 500 ppm limit under both wet and dry year conditions. (See Section 4.2, page 4.2-82).

**Finding:** No mitigation is available. High suspended sediment concentrations are a significant and unavoidable impact of the project.

### **4.3 WATER QUALITY**

#### **WQ-9: Reservoir Drawdown**

Lowering of water levels in the reservoir would cause increased turbidity and decreased dissolved oxygen. Installation of a sheetpile barrier in the reservoir and removal of sediments near the intake gate would increase turbidity. In addition to fine suspended solids, the release of stream channel porewater from the Carmel River and San Clemente Creek into the reservoir would cause iron oxidation to occur, further increasing turbidity and decreasing dissolved oxygen levels. During and following drawdown, movement of sediment previously deposited near the mouths of the Carmel River and San Clemente Creek could slump and shift into the reservoir. This sediment movement could cause further release of anaerobic porewater, resulting in lowered dissolved oxygen. (See Section 4.3, pages 4.3-47 and 4.3-48, the Alternative 2 discussion on 4.3-46, and the Proponent's Proposed Project discussion on 4.3-38, and 4.3-39).

**Finding:** The impact has been reduced by adoption of Mitigation Measure WQ-9 which requires that reservoir water level be drawn down at a relatively slow rate (about 0.5 feet or less per day). However, even with the mitigation discussed above, water quality degradation resulting from reservoir drawdown would remain significant and unavoidable.

#### **WQ-10: Reservoir Sediment Excavation**

About 500,000 cubic yards of sediment would be excavated and transported to a central stockpile area within the reservoir area, where the material will be allowed to drain. Excavation of sediment above the reservoir could cause further turbidity increases and dissolved oxygen decreases within the reservoir through disturbance of sediments and subsurface flows. Very fine suspended sediment and iron oxides would be expected to remain in suspension in the reservoir, resulting in elevated turbidity and decreased dissolved oxygen levels during the periods of excavation activity and for about two months following excavation. (See Section 4.3, pages 4.3-47 and 4.3-48, and the Alternative 1 discussion on page 4.3-43).

**Finding:** No mitigation is available. The effect of sediment excavation on turbidity and dissolved oxygen in the reservoir is significant and unavoidable.

### **4.4 FISHERIES**

#### **FI-2: Dewatering River Channels for Construction Purposes**

The plunge pool and about 400 feet of channel immediately downstream of the SCD would be dewatered to facilitate dam removal. Rearing habitat supporting about 270 juvenile steelhead would be lost in the plunge pool and river channel. (Section 4.4, page 4.4-81, the Alternative 2 discussion on pages 4.4-76 and 4.4-77, and the Proponent's Proposed Project discussion on pages 4.4-55, 4.4-56, and 4.4-57).

**Finding:** The impact has been reduced by adoption of Mitigation Measure FI-2 which requires that stream flow from the Carmel River upstream of SCD be diverted around the plunge pool and the section of the river to be dewatered. Once flow is diverted out of the channel, water levels will be reduced in the plunge pool and other sections of the river. After water levels are lowered, fish rescues will be undertaken to capture and relocate fish from the affected reaches and relocate them to sections of the Carmel River that would support their growth and development. Fish rescues will continue until all possible fish are removed from the dewatered reach. Captured fish will be temporarily held in aerated coolers for transport to relocation sites. However, even with the mitigation discussed above, the fish losses, along with the short-term loss of habitat for steelhead, cannot be fully mitigated and would remain significant and unavoidable.

#### **FI-4: Diversion of Carmel River and San Clemente Creek around San Clemente Reservoir for Construction Purposes**

The Carmel River and San Clemente Creek would be diverted around San Clemente reservoir and dam site. The Carmel River would be diverted out of its channel for about 3,300 feet upstream of the SCD and about 1,350 feet for San Clemente Creek. Both stream channels would be out of production for two years. Loss of seasonal rearing habitat would affect an unknown number of juvenile steelhead rearing in the reservoir. (Section 4.4, pages 4.4-81 and 4.4-82, the Alternative 2 discussion on page 4.4-77, the Alternative 1 discussion on page 4.4-72, and the Proponent's Proposed Project discussion on pages 4.4-57 and 4.4-58).

**Finding:** The impact has been reduced by adoption of Mitigation Measure FI-4 which requires that fish be rescued from the area of the diversion sites prior to constructing the diversion structures. Once the sheet piles are installed and the diversion pipes connected, water will be diverted into the pipes. Flow in the river channel downstream of the diversion will be reduced and the reduction in flow would facilitate fish rescues. After water levels are lowered, a fish rescue will occur in the Carmel River and San Clemente Creek channels between the diversion point and the reservoir. Rescues will capture and relocate fish from the affected reaches and relocate them to sections of the Carmel River that will support their growth and development, and will continue until all possible fish are removed from the dewatered reach. Captured fish will be temporarily held in aerated coolers for transport to relocation sites. However, even with the mitigation discussed above, the fish losses, along with the short-term loss of rearing habitat for steelhead, cannot be fully mitigated and would remain significant and unavoidable.

#### **FI-5: Reservoir Dewatering**

The reservoir would be lowered to 510 feet elevation. Lowering the water level would create a shallow, warm pool of standing water behind the dam with an estimated maximum depth of about five feet. The water level would be lowered to the bottom of the dam once the intake gate is repaired. Construction dewatering would cause a loss of steelhead and a short-term loss of steelhead rearing habitat in the reservoir. (Section 4.4, page 4.4-82, and the Proponent's Proposed Project discussion on pages 4.4-58 and 4.4-59).

**Finding:** The impact has been reduced by adoption of Mitigation Measure FI-5 which requires installation of nets and fish traps across the channels leading into the reservoir to prevent fish from swimming upstream into the Carmel River and San Clemente Creek. A fish rescue will occur in the reservoir during drawdown. Rescued fish will be relocated to other suitable habitat downstream of OCRD in the Carmel River. However, even with the mitigation discussed above, the fish losses, along with the loss of rearing habitat for steelhead, cannot be fully mitigated and would remain significant and unavoidable.

#### **FI-13: Stream Sediment Removal, Storage, and Associated Restoration**

About 2,200 feet of San Clemente Creek would become the Carmel River including about 850 feet of channel currently submerged in the reservoir in the San Clemente arm. The Carmel River would change in length from about 3,000 feet to 2,650 feet, a reduction of about 350 feet. San Clemente Creek would lose 1,350 feet of channel from the reservoir upstream to the confluence with the realigned Carmel River channel. There would be a net loss of about 1,700 feet of channel. Accumulated sediment would be excavated from about 800 feet of the existing San Clemente Creek channel. About 3,600 feet of the present Carmel River channel upstream of the SCD would be permanently lost to sediment storage. A temporary loss of habitat for steelhead and other aquatic species would result in the reservoir and in both channels during construction. The Carmel River and San Clemente Creek would not support conditions for rearing steelhead during CY 4. (Section 4.4, pages 4.4-82 and 4.4-83).

**Finding:** The impact has been reduced by adoption of Mitigation Measure FI-13 which requires construction of a new channel for the Carmel River through the diversion bypass channel between the

Carmel River and San Clemente Creek, and down the San Clemente Creek arm. The new configuration would include about 300 feet of constructed channel through the bypass, and about 2,200 feet of newly constructed channel in the existing San Clemente Creek arm. Channel restoration activities will include excavation and placement of gravel, cobble, and boulder materials salvaged during sediment removal. Habitat in the restored channels will be revegetated with native trees and shrubs. The SCD will be removed, restoring unimpaired fish access past the SCD site to the upper watershed and substantially restoring sediment transport to the lower river. However, even though there is a long-term benefit, there are significant and unavoidable short-term impacts that cannot be mitigated.

#### **4.5 VEGETATION AND WILDLIFE**

##### **WI-3: Cofferdam Construction and Plunge Pool Dewatering**

Construction of a cofferdam and subsequent draining of the plunge pool could adversely affect any CRLF, western pond turtles and other special-status species. (See 4.5, page 4.5-59, the Proponent's Proposed Project discussion on pages 4.5-40, 4.5-41, 4.5-42, and 4.5-43, and Appendix V).

**Finding:** The impact has been reduced by adoption of Mitigation Measure WI-3 which requires pre-construction surveys, the capture and relocation of CRLF, western pond turtles, two-striped garter snakes, and other special-status species, and a bullfrog eradication program. However, even with implementation of this mitigation, project impacts cannot be fully mitigated and would remain potentially significant and unavoidable.

##### **WI-10: Reservoir Drawdown or Elimination with Sediment Removal**

Reservoir drawdown may strand CRLF tadpoles from pool habitat and may isolate transformed and adult CRLF far enough from moisture sources to cause desiccation and death. As pools decline, CRLF and tadpoles may become increasingly vulnerable to predation as well as to weather extremes. The drawdown may also isolate western pond turtles and potentially impact juveniles by limiting available cover and forage. (See Section 4.5, page 4.5-59, the Alternative 1 discussion on pages 4.5-53 and 4.5-54, the Proponent's Proposed Project discussion on pages 4.5-40, 4.5-41, 4.5-42, and 4.5-43, and Appendix V).

**Finding:** The impact has been reduced by adoption of Mitigation Measure WI-10 which requires that CDFG and USFWS-approved biologists monitor and oversee all terrestrial wildlife-related activities associated with the drawdown and subsequent activities in the reservoir bed. The biologists and crew will rescue CRLF, tadpoles, and western pond turtle adults, juveniles and hatchlings from the inlet streams and pools in the sediment bed, and relocate them to appropriate nearby aquatic habitat within one mile of the San Clemente reservoir site. Other native wildlife taken incidentally during these operations will be transported to appropriate habitat (which may be the same sites selected for relocation of CRLF and tadpoles and western pond turtle juveniles and hatchlings). Rescue and relocation will continue throughout reservoir drawdown, vegetation clearing, and sediment excavation operations. However, even with implementation of this mitigation, project impacts cannot be fully mitigated and would remain potentially significant and unavoidable.

##### **WI-11: Sediment Removal**

Removal of sediment from San Clemente Reservoir would adversely affect nearly all CRLF spawning and summer habitat within the reservoir. Some species loss would occur also occur during rescue and relocation of CRLF and tadpoles, Coast Range newt larvae, and western pond turtle juveniles and hatchlings from the sediment bed. Other losses would occur if individuals are missed during the rescue operation. (See Section 4.5, page 4.5-59, the Alternative 1 discussion on pages 4.5-54, and 4.5-55, the Proponent's Proposed Project discussion on pages 4.5-40, 4.5-41, 4.5-42, and 4.5-43, and Appendix V).

**Finding:** The impact has been reduced by adoption of Mitigation Measure WI-11 which requires that surveys be conducted, measures be implemented for Protection Measures for Special Status Species, that rescue and relocation actions be conducted, and that vegetation be removed using handheld tools. However, even with implementation of this mitigation, project impacts cannot be fully mitigated and would remain potentially significant and unavoidable.

#### **WI-13: Bypass Channel Excavation**

Brushland and riparian habitat clearing and channel excavation would remove habitat for aquatic species including the CRLF, Coast Range newt and the western pond turtle. These activities may also affect other special-status terrestrial wildlife species, particularly the Monterey dusky-footed wood rat. (See Section 4.5, pages 4.5-61 and 4.5-62, the Proponent's Proposed Project discussion on pages 4.5-40, 4.5-41, 4.5-42, and 4.5-43, and Appendix V).

**Finding:** The impact has been reduced by adoption of Mitigation Measure WI-13 which requires that surveys be conducted, measures be implemented from Protection Measures for Special Status Species, and that rescue and relocation actions be conducted. However, even with implementation of this mitigation, project impacts cannot be fully mitigated and would remain potentially significant and unavoidable.

### **4.7 AIR QUALITY**

#### **AQ-1: Dam Site Activities**

Construction activities would generate temporary emissions from diesel-powered equipment and road dust. Fugitive dust could exceed the Monterey Bay Air Pollution Control District (MBUAPCD) construction thresholds of significance for PM10. (See Section 4.7, pages 4.7-28 and 4.7-29, and the Proponent's Proposed Project discussion on pages 4.7-13, 4.7-14, 4.7-17, 4.7-18, and 4.7-19).

**Finding:** The impact has been reduced by adoption of Mitigation Measure AQ-1 which requires implementation of measures to control emissions and fugitive dust during construction will partially mitigate this impact. However, even with the mitigation discussed above, the short-term impact will remain significant and unavoidable.

#### **AQ-2: Access Road Upgrades**

Construction activities during access road improvements could create a dust nuisance. (See Section 4.7, pages 4.7-28 and 4.7-29, and the Proponent's Proposed Project discussion on pages 4.7-13, 4.7-14, 4.7-17, 4.7-18, and 4.7-19).

**Finding:** The impact has been reduced by adoption of Mitigation Measure AQ-2 which requires implementation of measures to control fugitive dust during access road construction. However, even with the mitigation discussed above, the short-term impact will remain significant and unavoidable.

#### **AQ-3: Project-Generated Traffic**

Construction activities during access road improvements and truck travel on the unpaved roads could create a dust nuisance. (See Section 4.7, page 4.7-28, and the Proponent's Proposed Project discussion on pages 4.7-21, 4.7-22, and 4.7-23, and 4.7-19 and 4.7-20, and 4.7-21).

**Finding:** The impact has been reduced by adoption of Mitigation Measure AQ-3 which requires implementation of measures to control fugitive dust during access road construction and construction use



of unpaved roads. However, even with the mitigation discussed above, the short-term impact will remain significant and unavoidable.

#### **4.8 NOISE**

##### **NO-1: Dam Site Activities**

Construction activities associated would cause short-term noise impacts. (See Section 4.8, page 4.8-19, and the Proponent's Proposed Project discussion on page 4.8-10).

**Finding:** The impact has been reduced by adoption of Mitigation Measure NO-1, which limits construction activities to normal daytime hours. However, even with implementation of this mitigation, given the sparsely populated rural nature of the Project area, the impact will remain significant and unavoidable.

##### **NO-2: Access Road Upgrades**

Road and bridge widening and improvements would generate noise detectable to sensitive receptors. Noise impacts may remain at a significant level for several weeks. (See Section 4.8, page 4.8-19, and the Proponent's Proposed Project discussion on pages 4.8-11, 4.8-12, 4.8-13, and 4.8-14).

**Finding:** The impact has been reduced by adoption of Mitigation Measure NO-2 which requires the use and maintenance of quiet design construction equipment, the installation of engine enclosure panels, and the implementation of timing restrictions and limitations on equipment idling. Implementation of these mitigation measures would reduce the impacts of noise generated during access road improvements, but the impact would remain significant and unavoidable.

##### **NO-3: Project-Generated Traffic**

Typical project-generated traffic would be comprised of material delivery trucks, concrete-mixing trucks, and construction worker vehicles traveling to and from the site. Noise levels at various times and at some locations may exceed the normally acceptable range or be more than 5 dBA above background. (See Section 4.8, page 4.8-19, and the Proponent's Proposed Project discussion on pages 4.8-14, 4.8-15, and 4.8-16).

**Finding:** The impact has been reduced by adoption of Mitigation Measure NO-3 which requires the use and maintenance of quiet design construction equipment, the installation of engine enclosure panels, and the implementation of timing restrictions and limitations on equipment idling. Implementation of these mitigation measures would reduce the impacts of noise from construction related travel, but the impact would remain significant and unavoidable.

#### **4.9 TRAFFIC AND CIRCULATION**

##### **TC-1: Road Segment Traffic Operations**

Access improvements and construction use of the Jeep Trail and the new road connecting the Jeep Trail to the reservoir would add additional traffic to the roadway. During peak construction activity, it is estimated that 160 vehicle trips per day would be generated by Alternative 3, most of which would use the Jeep Trail between Cachagua Road and the new access road to the reservoir. Non-project traffic using the Jeep Trail would be subjected to delays. (See Section 4.9, pages 4.9-46, 4.9-47, 4.9-48, and 4.9-49).

**Finding:** The impact has been reduced by adoption of Mitigation Measure TC-1 which requires implementation of a construction management plan and a traffic control plan. Even with implementation of these measures, traffic delays to non-project related users may exceed 10 minutes, therefore the impact remains potentially significant and unavoidable.

#### **TC-3b: Traffic Safety San Clemente Drive**

The Cachagua Access Route would be the primary route providing access above the SCD. However, San Clemente Drive would be needed to provide access below the dam. San Clemente Drive is a narrow two-lane road with no facilities for pedestrians and bicyclists. Pedestrian and bicycle circulation on San Clemente Drive would be impacted. (See Section 4.9, page 4.9-46, the Alternative 1 discussion on page 4.9-35, and the Proponent's Proposed Project discussion on pages 4.9-19, 4.9-20, 4.9-21, and 4.9-22).

**Finding:** The impact has been reduced by adoption of Mitigation Measure TC-3b which requires the implementation of a trip reduction plan, a traffic coordination and communication plan, and a traffic safety plan in addition to funding additional traffic enforcement. Even with implementation of these measures, the impact to traffic safety would remain potentially significant and unavoidable.

#### **TC-6 Neighborhood Quality of Life**

Construction traffic would increase on to San Clemente Drive. San Clemente Drive is a private street that serves a residential development and provides access below the SCD. Truck traffic in this residential development would impact the quality of life of the residents. Use of the Jeep Trail would impact the neighborhood quality of life of the users of the Stone Cabin. (See Section 4.9, page 4.9-46, the Alternative 1 discussion on page 4.9-39 and 4.9-40, and pages 4.9-27, 4.9-28, 4.9-29, 4.9-30, and 4.9-31).

**Finding:** The impact has been reduced by adoption of Mitigation Measure TC-6 which requires the implementation of a trip reduction plan, a traffic coordination and communication plan, and a traffic safety plan in addition to funding additional traffic enforcement. However, even with implementation of these mitigation measures impacts to San Clemente Drive and the Jeep Trail would remain potentially significant and unavoidable.

### **4.10 CULTURAL RESOURCES**

#### **CR-4: Demolition or Alteration to Historic Properties**

The OCRD and associated fish ladder would be altered due to proposed improvements to access roads to SCD. The SCD and associated fish ladder would be demolished. (See Section 4.10, page 4.10-26).

**Finding:** The impact has been reduced by adoption of Mitigation Measure CR-4 with the requirement to perform historic properties recordation and to complete HABS/HAER level documentation. However, even with implementation of these mitigation measures, the impact will remain significant and unavoidable.

#### **CR-5: Alteration of Surrounding Environment**

Project construction would result in alteration to the character of the setting of significant historic resources of the SCD Historic District. (See Section 4.10, page 4.10-26, and the Proponent's Proposed Project discussion on page 4.10-24).

**Finding:** The impact has been reduced by adoption of Mitigation Measure CR-4 with the requirement to prepare a National Register of Historic Places Nomination Form for the SCD Historic District. However, even with implementation of this mitigation, this impact will remain significant and unavoidable.

#### **CR-6: Introduction of Visual Obstructions**

Visual effects to the SCD Historic District and alteration or demolition of historic resources within the district would adversely affect their visual integrity. (See Section 4.10, page 4.10-26, and the Proponent's Proposed Project discussion on page 4.10-24).

**Finding:** The impact has been reduced by adoption of Mitigation Measure CR-6 with the requirement to conduct photo documentation of historic resources in the project area. However, even with implementation of this measure, this impact would remain significant and unavoidable.

### **4.12 RECREATION**

#### **Issue REC-2: Disruption of Use of Jeep Trail to Stone Cabin**

During the construction season, there would be daily construction traffic use of the Jeep Trail. (See Section 4.12, page 4.12-8, and the Alternative 1 discussion on pages 4.12-6 and 4.12-7).

**Finding:** The impact has been reduced by adoption of Mitigation Measure REC-2 with the requirement to operate construction equipment during normal working hours. However, even with implementation of this measure, this impact would remain significant and unavoidable.

## PART II

### Findings Regarding Alternatives to the Project

The findings on significant effects and mitigation showed that the following categories of effects will remain significant even after the imposition of mitigation:

- Hydrology and Water Resources
- Water Quality
- Fisheries
- Vegetation and Wildlife
- Air Quality
- Noise
- Traffic and Circulation
- Cultural Resources
- Recreation

Under CEQA, when an agency finds that feasible mitigation measures alone will not lessen one or more effects to a level of less than significant, the agency must make a finding on whether the alternatives examined in the EIR could eliminate or avoid the significant effect. DWR finds that none of the alternatives examined in the EIR would be a feasible means to avoid or eliminate the remaining significant effects.

The EIR examines four alternatives to the proposed project:

1. Dam Notching
2. Dam Removal
4. No Project
5. Dam Strengthening (described as the Proponent's Proposed Project in the final EIR/EIS)

The need for the SCD Seismic Safety Project is to increase dam safety to meet current standards for withstanding a MCE and passing the PMF at the dam. The purposes and objectives for the project are to protect public safety, provide fish passage at the dam, maintain a CAW point of diversion on the Carmel River to support existing water supply facilities, water rights, and services, and to minimize financial impacts to CAW ratepayers. With the exception of No Project, all of the alternatives in the EIR/EIS will meet the need of eliminating safety risks associated with the MCE and PMF at the SCD and address the stated objectives. The No Project Alternative is not feasible because it fails to meet the need for the project to increase dam safety to meet current standards for withstanding a MCE and passing the PMF at the dam.

The Department finds that analysis of impacts and mitigation contained in the EIR/EIS (summarized in Chapter 2, Table 2.1) shows that the remaining project alternatives, Dam Strengthening (Proponent's Proposed Alternative), Dam Notching, Dam Removal, and the Carmel River Reroute and Dam Removal, all would entail some significant unavoidable and unmitigable environmental impacts. The Department finds that, overall, none of the alternatives is more environmentally favorable than the others. The Department finds that no alternative can reduce all significant unavoidable and unmitigable impacts to a level that is less than significant and that implementation of the Carmel River Reroute and Dam Removal alternative will meet DSOD safety standards, through dam removal, and will satisfy the project objectives. The Department explains how it balances the benefits of the project against its unavoidable environmental risk in Exhibit C - Statement of Overriding Considerations. The discussion below provides more detail on each alternative and significant unavoidable, and unmitigable environmental impacts.

During the EIR/EIS progress, the project proponent (CAW) identified Dam Strengthening as the Proponent's Proposed Project, which was identified as such in the final EIR/EIS. All other alternatives

considered in the final EIR/EIS were numbered. CAW now proposes to undertake the project identified in the final EIR/EIS as Alternative 3 (Carmel River Reroute and Dam Removal). The Dam Strengthening alternative is discussed herein as Alternative 5 to the Carmel River Reroute and Dam Removal proposal.

### **Alternative 1: Dam Notching with Partial Sediment Removal**

Alternative 1 would eliminate safety risks by notching the SCD in the area of the existing spillway bays to about EL. 506 feet. The gates, piers and walkway at the top of the SCD would be removed. This alternative would reduce mass sufficiently to avoid catastrophic failure of the SCD during a MCE event. Notching to EL. 506 feet also would ensure dam safety during a PMF. Alternative 1 would meet the project need to increase dam safety to current standards for withstanding a MCE and passing the PMF, and would address the objectives stated in section 1.4 of the EIR/EIS.

A new facility to divert water would be constructed upstream of the SCD to replace the existing surface water diversion. The electrical system at the SCD would be upgraded to support a conveyor sediment transport system. During construction, the Carmel River and San Clemente Creek would be diverted around the construction area, the plunge pool at the base of the SCD would be dewatered, and a fish rescue and relocation operation would be operated during construction years. The plunge pool downstream of the SCD would be completely drained prior to dam notching to allow access for construction workers and machinery for notching operations and construction of a new fish ladder.

Sediment in the reservoir would be removed down to the level of the notch. The Carmel River channel and San Clemente Creek channel would be reconstructed in a geomorphically stable configuration in the excavated sediments in the reservoir's inundation zone. Approximately 1.5 million cubic yards of sediment would be removed over by excavation. Sediment would be transported from the reservoir via a conveyor belt system to a disposal area east of San Clemente Reservoir.

The existing fish ladder would be removed and a new ladder would be designed and built to accommodate the lowered dam elevation and to comply with criteria for fish passage promulgated by NMFS and CDFG. A sluice gate would be installed to enable managed sediment releases to maintain upstream passage from the fish ladder exit to upstream channels. Sediment management following the SOMP would be required to ensure fish passage through the accumulated sediment. A notch would be cut into the OCRD, which is about 1800-feet downstream of SCD, in order to provide adequate fish passage.

A design for sediment transport and disposal would be implemented that avoids sediment transport by truck through populated areas. Existing access roads (including San Clemente Drive) with minor improvements would be used to reach the base of the SCD for construction activities. OCRD bridge and the access road from the CVFP to the SCD would be improved. The existing access road along the east side of the Carmel River, between OCRD and the base of SCD, would be rebuilt. An existing 4WD road (the Jeep Trail) would be improved to connect Cachagua Road with the sediment disposal site and to the reservoir area above the SCD. This route would only be used to move construction equipment and materials. All sediment transport would occur via conveyor belt from the SCD to the disposal site. No sediment would be hauled by truck over any roads. The stream channels through the upstream sediment plain would be stabilized.

The dam notching alternative would take an estimated six years to complete, including environmental review, permitting, design, infrastructure improvements, sediment removal, dam notching and upstream channel reconstruction through the sediment plain.

Implementation of Alternative 1 would cause significant and unavoidable impacts to Water Quality (WQ-9, WQ-10, and WQ-13), Fisheries (FI-2, FI-4, and FI-5, and FI-13), Vegetation and Wildlife (WI-3, WI-10, and WI-11), Air Quality (AQ-1, AQ-2, and AQ-3), Noise (NO-1, NO-2, NO-3, and NO-5), Traffic and Circulation (TC-1, TC-3b, and TC-6), Cultural Resources (CR-4, CR-5, and CR-6), Aesthetics (VQ-5), Recreation (REC-2 and REC-4), and Land Use (LU-1). Less than significant impacts, and potentially significant impacts that would be reduced to a less than significant level by mitigation measures

incorporated into Alternative 1 would occur in all resource categories as identified in Chapter 2 and Chapter 4 of the EIR/EIS.

In comparison, as discussed above, and in Chapter 2 and Chapter 4 of the EIR/EIS, implementation of the Alternative 3 (Carmel River Reroute and Dam Removal ) would cause significant and unavoidable impacts to Hydrology and Water Resources (WR-2a, WR-2b, and WR-4b), Water Quality (WQ-9 and WQ-10), Fisheries (FI-2, FI-4, FI-5, and FI-13), Vegetation and Wildlife (WI-3, WI-10, WI-11, and WI-13), Air Quality (AQ-1, AQ-2, and AQ-3), Noise (NO-1, NO-2, and NO-3), Traffic and Circulation (TC-1, TC-3b and TC-6), Cultural Resources (CR-4, CR-5, and CR-6), and Recreation (REC-2).

Alternative 1 would pose fewer significant and unavoidable impacts to hydrology and water resources, vegetation and wildlife, than would Alternative 3, and would have similar impacts to fisheries, air quality, traffic and circulation, and cultural resources. But Alternative 1 would pose more significant and unavoidable impacts to water quality, aesthetics, and recreation, and land use than would Alternative 3.

DWR finds that Dam Notching with Partial Sediment Removal, while not an infeasible means to avoid some of the residual significant effects of the project, creates other significant effects, equally undesirable, that are avoided by the selection of the Carmel River Reroute and Dam Removal project.

#### **Alternative 2: Dam Removal with Total Sediment Removal**

Alternative 2 would permanently eliminate safety concerns through the removal of the SCD. A new facility to divert water would be constructed upstream of the SCD site to replace the existing surface water diversion. The electrical system at the SCD would be upgraded to support a conveyor sediment transport system.

During construction, the Carmel River and San Clemente Creek would be diverted around the construction area, the plunge pool at the base of the SCD would be dewatered, and a fish rescue and relocation operation would be operated during construction years. The plunge pool downstream of the SCD would be completely drained prior to dam removal to allow access for demolition.

Approximately 2.4 million cy of sediment would be removed by excavation. Sediment would be transported from the reservoir via a conveyor belt system to a disposal area east of San Clemente Reservoir. The historic Carmel River channel and San Clemente Creek exposed by sediment excavation in the reservoir's inundation zone would be reconstructed in their historical valleys.

A design for sediment transport and disposal would be implemented that avoids sediment transport by truck through populated areas. Improvements would be made to existing access roads (including San Clemente Drive) and would be used to reach the base of the SCD for construction activities at and below the dam. The OCRD bridge and the access road from the CVFP to the SCD would be improved and the existing access road along the east side of the Carmel River, between OCRD and the base of SCD, would be rebuilt. An existing 4WD road (the Jeep Trail) would be improved to connect Cachagua Road with the sediment disposal site, and to the reservoir area above the SCD. This route would only be used to move construction equipment and materials. All sediment transport would occur via conveyor belt from the SCD to the disposal site.

The existing dam and fish ladder would be demolished and removed from the site. A notch would be cut into OCRD to provide adequate fish passage.

The dam removal alternative would take an estimated seven years to complete, including environmental review, permitting, design, infrastructure improvements, sediment removal, dam demolition, and creek channel reconstruction.

Implementation of the Dam Removal alternative would cause significant and unavoidable impacts to Hydrology and Water Resources (WR-2a, WR-2b, WR-4a, WR-4b, WR-5, and WR-6), Water Quality (WQ-9 and WQ-10), Fisheries (FI-2, FI-4, FI-5, FI-9a, and FI-13), Vegetation and Wildlife (WI-3, WI-10,

and WI-11), Air Quality (AQ-1, AQ-2, and AQ-3), Noise (NO-1, NO-2, NO-3, and NO-5), Traffic and Circulation (TC-1, TC-3b, and TC-6), Cultural Resources (CR-4, CR-5, and CR-6), Aesthetics (VQ-5), Recreation (REC-2 and REC-4), and Land Use (LU-1). Less than significant impacts, and potentially significant impacts that would be reduced to a less than significant level by mitigation measures incorporated into Alternative 2 would occur in all resource categories as identified in Chapter 2 and Chapter 4 of the EIR/EIS.

In comparison, as discussed above, and in Chapter 2 and Chapter 4 of the EIR/EIS, implementation of the Alternative 3 (Carmel River Reroute and Dam Removal ) would cause significant and unavoidable impacts to Hydrology and Water Resources (WR-2a, WR-2b, and WR-4b), Water Quality (WQ-9 and WQ-10), Fisheries (FI-2, FI-4, FI-5, and FI-13), Vegetation and Wildlife (WI-3, WI-10, WI-11, and WI-13), Air Quality (AQ-1, AQ-2, and AQ-3), Noise (NO-1, NO-2, and NO-3), Traffic and Circulation (TC-1, TC-3b and TC-6), Cultural Resources (CR-4, CR-5, and CR-6), and Recreation (REC-2).

Alternative 2 would meet the project need to increase dam safety to current standards for withstanding a MCE and passing the PMF, and would address the objectives stated in section 1.4 of the EIR/EIS. It would pose fewer significant and unavoidable impacts to vegetation and wildlife than would Alternative 3, and would have similar impacts to water quality, air quality, traffic and circulation, and cultural resources. But Alternative 2 would pose more significant and unavoidable impacts to hydrology and water resources, fisheries, noise, aesthetics, land use, and recreation than would Alternative 3.

DWR finds that Dam Removal with Total Sediment Removal, while not an infeasible means to avoid some of the residual significant effects of the project, creates other significant effects, equally undesirable, that are avoided by the selection of the Carmel River Reroute and Dam Removal project.

#### **Alternative 4: No Project**

The No Project alternative would leave the SCD in place with all its existing facilities. A new fish ladder would not be constructed, the sediment would be left in place behind the dam, and the OCRD would not be notched. The reservoir would continue to accumulate sediment at an average rate of about 16.5 AF per year. Minor sediment removal may occur to allow the SCD to maintain the existing surface water supply intake serving the upper Carmel Valley Village area. The existing drawdown ports in the SCD and the existing fish bypass facility would both likely remain operational until the reservoir fills with sediment.

However, selection of the No Project alternative would eliminate significant and unavoidable construction impacts associated with implementation of Alternative 3 (Carmel River Reroute and Dam Removal) and the other alternatives. As discussed above, and in Chapter 4 of the EIR/EIS, implementation of Alternative 3 would cause significant and unavoidable impacts to hydrology and water resources, water quality, fisheries, vegetation and wildlife, air quality, noise, traffic and circulation, cultural resources, and recreation.

Implementation of the No Project Alternative would avoid all of the potentially significant impacts that would be reduced to a less than significant level by mitigation measures with implementation of Alternative 3 and the other alternatives. However, as identified in Chapter 2 of the EIR/EIS, the No Project alternative would cause significant and unavoidable impacts to Geology and Soils (GS-1 and GS-6), Hydrology and Water Resources (WR-3b and WR-8), Water Quality (WQ-9 and WQ-15), Fisheries (FI-5, FI-8, FI-12, and FI-15), and would significantly and unavoidably impact public health and safety, hydrology, water quality, and fisheries.

The No Project Alternative would not meet the project need to increase dam safety to current standards for withstanding a MCE and passing the PMF at the dam, and would not address the objective of protecting public safety as stated in section 1.4 of the EIR/EIS. The No Project alternative would fail to adequately address the objective of providing fish passage at the SCD because the existing fish ladder no longer meets NMFS or CDFG standards, and the increase in sediment deposition behind the SCD would obstruct fish passage over time.

DWR finds that the No Project alternative is not a feasible means to avoid the residual significant effects of the project.

#### **Alternative 5: Dam Strengthening (Proponent's Proposed Project in final EIR/EIS)**

The Dam Strengthening alternative represents the project originally proposed by CAW. The Proponent's Proposed Project would comply with DSOD requirements to address safety deficiencies and eliminate the risk of failure during a MCE or a PMF event. The Proponent's Proposed Project would eliminate safety risks by thickening the downstream face of the SCD with concrete, strengthening the right abutment near the dam crest, modifying the spillway and dam crest to increase effective spillway width and armoring the abutments with gunite to prevent erosion.

A concrete batch plant would be at the base of the SCD. The electrical system at the dam would be improved. During construction, the Carmel River and San Clemente Creek would be diverted around the construction area, the plunge pool at the base of the SCD would be dewatered, and a fish rescue and relocation operation would be operated during construction years. The plunge pool downstream of the dam would be completely drained prior to dam thickening to allow access for construction workers and machinery for thickening operations and new fish ladder construction.

The existing fish ladder allows steelhead trout to ascend 68 feet to the reservoir and watershed above the SCD. The Proponent's Proposed Project includes construction of a new fish ladder that would comply with criteria for fish passage promulgated by the NMFS and the CDFG. Construction of the fish ladder would ensure long-term fish passage over the dam, but passage would still be considered impeded as compared to the dam removal alternatives. A sluice gate would be installed to manage sediment releases, to maintain upstream passage to the fish ladder exit and to maintain water flow into the CAW diversion pipeline. Sediment management following the Sediment Operations and Management Plan (SOMP) would be required to maintain the existing surface water supply intake and to ensure fish passage through the accumulated sediment. In addition, a notch would be cut into the Old Carmel River Dam (OCD), which is about 1800-feet downstream of SCD, in order to provide adequate fish passage.

A new access from Carmel Valley Road, the Tularcitos Access Route, would be constructed to bypass the portion of San Clemente Drive which goes through the Sleepy Hollow community. The access route would cross Tularcitos Creek and connect Carmel Valley Road to San Clemente Drive near CAW's Carmel Valley Filter Plant (CVFP). The OCD bridge and the access road from the CVFP to the SCD would be improved. The existing access road along the east side of the Carmel River, between the OCD and the base of SCD would be rebuilt. The bypassed portion of San Clemente Drive would be used for up to eight months the first year of construction until the Tularcitos Access Route is completed.

The dam strengthening alternative would take an estimated four to five years to complete, including environmental review, permitting, design, and infrastructure improvements.

Implementation of the Proponent's Proposed Project would cause significant and unavoidable impacts to Water Quality (WQ-9 and WQ-13), Fisheries (FI-2, FI-4, and FI-5), Vegetation and Wildlife (WI-3 and WI-7), Air Quality (AQ-1, AQ-2, and AQ-3), Noise (NO-1, NO-2, NO-3, and NO-4), Traffic and Circulation (TC-3b and TC-6), Cultural Resources (CR-4, CR-5, and CR-6), and Aesthetics (VQ-3). Less than significant impacts, and potentially significant impacts that would be reduced to a less than significant level by mitigation measures incorporated into the Proponent's Proposed Project would occur in all resource categories as identified in Chapter 2 and Chapter 4 of the EIR/EIS.

In comparison, as discussed above and in Chapter 2 and Chapter 4 of the EIR/EIS, implementation of the Alternative 3 (Carmel River Reroute and Dam Removal) would cause significant and unavoidable impacts to Hydrology and Water Resources (WR-2a, WR-2b, and WR-4b), Water Quality (WQ-9 and WQ-10), Fisheries (FI-2, FI-4, FI-5, and FI-13), Vegetation and Wildlife (WI-3, WI-10, WI-11, and WI-13), Air Quality (AQ-1, AQ-2, and AQ-3), Noise (NO-1, NO-2, and NO-3), Traffic and Circulation (TC-1, TC-3b and TC-6), Cultural Resources (CR-4, CR-5, and CR-6), and Recreation (REC-2).

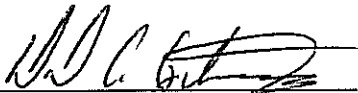


The Proponent's Proposed Project would meet the project need to increase dam safety to current standards for withstanding a MCE and passing the PMF, and would address the objectives stated in section 1.4 of the EIR/EIS. The Proponent's Proposed Project would pose more significant and unavoidable impacts to noise and aesthetics, than would Alternative 3, and would have similar impacts to air quality and cultural resources. It would pose fewer significant and unavoidable impacts to hydrology and water resources, fisheries, vegetation and wildlife, traffic and circulation, and Recreation than would Alternative 3.

DWR finds that Dam Strengthening, while not an infeasible means to avoid some of the residual significant effects of the project, creates other significant effects, equally undesirable, that are avoided by the selection of the Carmel River Reroute and Dam Removal project. However, neither alternative is inherently superior to the other from an environmental impact perspective.

#### FINDINGS DETERMINATION

I adopt the Findings set forth in this Exhibit B which meet the requirements of CEQA *Guidelines* Section 15091. To the extent that these findings conclude that various mitigation measures are feasible and within the Department's responsibility and jurisdiction, I direct the Department to implement these measures, thereby incorporating them as part of the proposed project.



David A. Gutierrez, Chief  
Division of Safety of Dams

3/11/11

Date

**San Clemente Dam Seismic Safety Project  
California State Clearinghouse #2005091148**

**EXHIBIT C  
STATEMENT OF OVERRIDING CONSIDERATIONS**

When called on to approve a project that would have one or more significant effects that cannot be avoided or substantially lessened, a public agency must explain how it views the balance of the economic, legal, social, technological, or other benefits of the project against the unavoidable adverse environmental effects before approving the project.

The Department adopts this Statement of Overriding Considerations and finds that, as part of the approval process, (a) the proposed project has been modified to eliminate or substantially lessen all significant effects on the environment where feasible, and (b) the remaining unavoidable impacts of the proposed project are an acceptable environmental cost in light of the environmental, economic, legal, social, technological, and other considerations set forth herein.

The findings above show that the following categories of environmental effects will remain significant even after the imposition of mitigation and the examination of alternatives:

- Hydrology and Water Resources
- Water Quality
- Fisheries
- Vegetation and Wildlife
- Air Quality
- Noise
- Traffic and Circulation
- Cultural Resources
- Recreation

The Department concluded that there are no feasible alternatives that can reduce all potentially significant and unavoidable impacts to a less than significant level and that all feasible alternatives have some significant and unavoidable impacts. (See Exhibit B.)

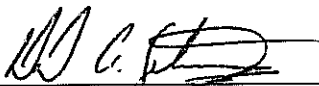
The Department determines that the San Clement Dam Seismic Safety Project Alternative 3 (Carmel River Reroute and Dam Removal) cannot be implemented in a way that would meet the need of the project without resulting in the significant and unavoidable impacts described in the Final EIR/EIS and summarized above, primarily because the project cannot be implemented in a way that accomplishes the basic project objectives without resulting in direct construction impacts. As discussed in the Exhibit B Findings, all potentially significant impacts have mitigation measures associated with them, except for Hydrology and Water Resources, WR-4b (increase in the frequency of high suspended sediment concentrations), Water Quality, WQ-10 (reservoir sediment excavation), and Fisheries, FI-13 (stream sediment removal, storage, and associated restoration). The remaining 23 potentially significant impacts that cannot be reduced to a less than significant level by incorporated mitigation measures all have associated mitigation measures that will at least lessen the overall impact, although not to less than significant levels. The Department has balanced the economic, legal, social, technological, and other benefits of the project and has determined that the benefits of the project outweigh its unavoidable adverse environmental impacts.

The Department determines that the San Clement Dam Seismic Safety Project Alternative 3 (Carmel River Reroute and Dam Removal) provides the following public benefits as described in detail in the Final EIR/EIS that justify proceeding with the project despite the environmental cost of the residual significant effects:

1. The Carmel River Reroute and Dam Removal project meets the need of eliminating safety risks associated with the MCE and PMF at the SCD;
2. The Carmel River Reroute and Dam Removal project protects public safety by removing the dam;
3. The Carmel River Reroute and Dam Removal project provides fish passage by removing the dam and rerouting the Carmel River to provide unobstructed flow from the mouth of the Carmel River to Los Padres Dam above the site of the San Clement Dam site;
4. The Carmel River Reroute and Dam Removal project maintains a CAW point of diversion on the Carmel River to support existing water supply facilities, water rights, and services; and
5. Although the cost of implementing Alternative 3 is more costly than the Proponent's Proposed Project as identified in the Final EIR/EIS, CAW is working with other parties to provide funding to minimize financial impacts to CAW ratepayers.

#### STATEMENT OF OVERRIDING CONSIDERATIONS DETERMINATION

I adopt the Statement of Overriding Considerations set forth in this Exhibit C, which meets the requirements of CEQA Guidelines Section 15093.



David A. Gutierrez, Chief  
Division of Safety of Dams

3 / 11 / 11

Date

Original Copy  
DEPT. OF WATER RESOURCES  
DIV. SAFETY OF DAMS  
2011 MAR 11 AM 8:36



DEPARTMENT OF WATER RESOURCES  
DIVISION OF SAFETY DAMS

SAN CLEMENTE DAM SEISMIC SAFETY PROJECT

# **EXHIBIT D**

## **Mitigation Monitoring and Reporting Program (MMRP)**

---

MARCH 2011

California State Clearinghouse #2005091148



## **1.0 MITIGATION MONITORING AND REPORTING PROGRAM**

### **1.1 Introduction**

The *California Environmental Quality Act* (CEQA) requires the adoption of feasible mitigation measures to reduce the severity and magnitude of potentially significant environmental impacts associated with project development. The Final Environmental Impact Report/Environmental Impact Statement (Final EIR/EIS) for the San Clemente Dam Seismic Safety Project includes mitigation measures to reduce the potential environmental effects of the proposed project. The Project selected for construction by the Project Proponent, California American Water Company (CAW), is the Carmel River Reroute and Dam Removal (Alternative 3).

Monitoring of the implementation of adopted mitigation measures is required by Public Resources Code §21081.6. The Final EIR/EIS includes specific mitigation measures for Alternative 3 and describes the process whereby the mitigation measures would be monitored. The Final EIR/EIS was certified on December 31, 2007. Findings were made in Exhibit B as required under the CEQA Guidelines Section 15091(a)(1) which include mitigation measures. Following the Department's approval of the Findings, of the project and of this MMRP, the following mitigation measures that have been incorporated into the approved projects will be monitored in the manner specified by this MMRP.

### **1.2 Purpose**

The purpose of the MMRP is to ensure compliance with all mitigation measures designed to mitigate or avoid potentially significant adverse environmental impacts that could result from implementation of Alternative 3, as identified in the Final EIR/EIS. Implementation of this MMRP shall be accomplished by the Project Proponent (CAW), and its agents. Project-specific mitigation measures will be implemented during the time frames specified in the MMRP, and reports will be generated to document implementation of the mitigation measures. Copies of all reports identified in the MMRP will be sent to the Department at the same time they are submitted to the designated regulatory agencies.

### **1.3 Summary Project Description**

Alternative 3 involves reroute of the Carmel River and complete removal of the San Clemente Dam (SCD), which is owned and operated by CAW. The proposed improvements are intended to comply with the Department's Division of Safety of Dams (DSOD) requirements to address safety deficiencies and eliminate the risk of failure during a Maximum Credible Earthquake (MCE) or Probable Maximum Flood (PMF) event.

Components of Alternative 3 as proposed by CAW include:

- Dewater the plunge pool
- Remove approximately 380,000 cubic yards of sediment behind the SCD
- Permanently bypass a portion of the Carmel River by excavating a 450-foot channel between the Carmel River and San Clemente Creek
- Improve existing access roads
- Completely demolish the SCD and fish ladder
- Construct a new facility to divert water to replace the existing diversion at the SCD

MITIGATION MONITORING AND REPORTING PROGRAM

---

This project is expected to take five years to complete, including environmental review, permitting, design, infrastructure improvements, sediment removal, bypass channel excavation, diversion dike construction, dam demolition, and creek channel reconstruction. A complete analysis of the components of Alternative 3 is located in Chapter 4 of the Final EIR/EIS. The Project purpose, need, and objectives are addressed in Chapter 1, Section 1.4 of the Final EIR/EIS.

#### **1.4 Responsibilities and Duties**

The Department would be responsible for ensuring that that mitigation measures are implemented during construction and restoration activities of Alternative 3. CAW and its agents shall be responsible for implementation of the mitigation measures and for the monitoring and reporting associated with those measures. In general, monitoring will consist of demonstrating that mitigation measures are implemented, and that the responsible entities monitored the implementation of the measures. CAW is responsible for ensuring that copies of all reports identified in the MMRP are sent to the Department at the same time they are submitted to the designated regulatory agencies.

#### **1.5 Mitigation Monitoring and Reporting Plan Matrix**

All project-specific mitigation measures included in the Final EIR/EIS would be monitored in conjunction with the MMRP for implementation of Alternative 3. The following MMRP matrix includes all of the applicable mitigation and monitoring information for implementation of Alternative 3, the Carmel River Reroute and Dam Removal Project.

## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
<b>4.1 Geology and Soils</b>  <b>GS-2:</b> Qualified Geotechnical Engineer or Engineering Geologist will conduct pre-construction surveys for design specifications, develop slope stabilizing BMPs for design specifications, and implement appropriate BMPs in SWPPP (Appendix K) such as, use matting or netting, mulch areas, seed after final grading, implement and maintain a revegetation program, adhere to permit requirements. A 10-year post-construction monitoring program will be executed.	Monitor project construction area for compliance with design specifications, slope stability, implementation of BMPs, and with the post-construction monitoring program. Monitoring results will be reported to CCRWQCB, Monterey County, USACE, CDFG, USEPA and DWR.	Applicant's Environmental Inspector and Project Engineer	During construction, inspect daily in areas under active construction or equipment operation, weekly in areas with no active construction or equipment operation, within 24-hours of each 0.5 inch or greater rainfall event, soil and weather conditions permitting. Reports of daily inspections will be submitted monthly to the agencies.  Verbally report noncompliance within 24 hours from time applicant is first aware of the circumstance and submits written report within 5 days. Noncompliance reports will be made to the appropriate agency identified in the SWPPP and SPCC (Appendices K and R), to the U.S. EPA Emergency Response Branch, the Central Coast Regional Water Quality Control Board (CCRWQCB), and DWR.  Post-construction monitoring will be conducted for ten years, and reports will be submitted to the agencies monthly.	USEPA, CCRWQCB, USACE, CDFG, Monterey County Planning and Building Inspection Department
<b>GS-4:</b> Implement erosion control methods and BMPs in SWPPP (Appendix K) including, no fill placed on canyon walls above river, use	Monitor and maintain erosion control methods. Inspect cut slopes to prevent failure. Monitor project construction	Applicant's Environmental Inspector and Project Engineer	During construction, inspect daily in areas under active construction or equipment operation, weekly in areas with	USEPA, CCRWQCB, USACE, CDFG, Monterey County Planning and Building



## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
<p>retaining walls, adequately size and locate erosion control facilities, use filter fabrics, berms, hay bales and other erosion control methods, construct spill and spoil areas to prevent silt and clay erosion, control surface drainage from cut, fill, borrow, and disposal areas. Inspect cut slopes to prevent slope failures and temporary wall rock raveling, use blasting mats to capture and direct rock debris, erect temporary walls adjacent to existing access road to contain blasted rock, permanently revegetate disturbed areas immediately after completing road improvements. If necessary, implement temporary revegetation and erosion control, install over-wintering protection to prevent undermining or washout, adhere to permit requirements.</p>	<p>area for compliance with implementation of BMPs, and with the post-construction monitoring program. Monitoring results will be reported to CCRWQCB, Monterey County, USACE, CDFG, USEPA and DWR.</p>		<p>no active construction or equipment operation, within 24-hours of each 0.5 inch or greater rainfall event, soil and weather conditions permitting. Reports of daily inspections will be submitted monthly to the agencies.</p> <p>Verbally report noncompliance within 24 hours from time applicant is first aware of the circumstance and submit written report within 5 days.</p> <p>Noncompliance reports will be made to the appropriate agency identified in the SWPPP and SPCC (Appendices K and R), to the U.S. EPA Emergency Response Branch, the Central Coast Regional Water Quality Control Board (CCRWQCB), and DWR.</p> <p>Post-construction monitoring will be conducted for ten years, and reports will be submitted to the agencies monthly.</p>	<p>Inspection Department</p>
<p>GS-5: Implement measures in the blasting plan such as controlling excessive vibration by limiting the size of charges and using charge delays. Follow procedures for safe storage, handling, loading, firing, and disposal of explosive materials. Implement blasting BMPs in the SWPPP (Appendix K) including use of blasting mats and fabric barriers.</p>	<p>Monitor compliance with blasting plan and report to Monterey County and DWR.</p>	<p>Applicant's Environmental Inspector and Project Engineer</p>	<p>Monitor throughout blasting activities.</p> <p>Monthly monitoring reports will be submitted to Monterey County.</p>	<p>Monterey County Planning and Building Inspection Department</p>

MITIGATION MONITORING AND REPORTING PROGRAM				
MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
<b>4.2 Hydrology and Water Resources</b>				
<p><b>WR-2a:</b> To minimize, following sediment excavation, construct geomorphically stable channels through the reservoir to the confluence of the San Clemente Creek and Carmel River channels. Construct channels with dimensions necessary to convey flows and sediment loads. Form a relatively wide river/creek valley that generally follows the 1921 contours along the upper reaches of the river/creek. Create a bankfull and thalweg channels with limited grading of the existing alluvial deposits. The bankfull channel will be sized to hold a two-year event. The low-flow channel will pass median annual flows.</p>	<p>Monitor compliance with design specifications, and report to CCRWQCB, USEPA, NMFS, CDFG, USFWS, Monterey County, and DWR.</p>	<p>Applicant's Environmental Inspector and Project Engineer</p>	<p>Monitor compliance with design specifications daily throughout construction. Submit monthly reports to agencies.</p>	<p>USFWS, CCRWQCB, USACE, CDFG, NMFS, and Monterey County Planning and Building Inspection Department</p>
<p>Implement bank stabilization measures including use of vegetative matter and plantings to limit erosion and sediment transport. A stream restoration plan will be prepared as part of final design for this alternative, and will include mitigation for the increase in sediment supply following construction.</p>	<p>Monitor bank stabilization and erosion control measures and report to CCRWQCB, Monterey County, USACE, CDFG, and DWR.</p>		<p>Bank stabilization and erosion control measures will be monitored daily during construction in areas under active construction or equipment operation, weekly in areas with no active construction or equipment operation, within 24-hours of each 0.5 inch or greater rainfall event, soil and weather conditions permitting. Reports of daily inspections will be submitted monthly to the agencies.</p>	

## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
<p>Revegetate the hillsides to reduce the long-term potential for sediment erosion as discussed in Appendix K (SWPPP) and Appendix U (Botanical Resources Management Plan).</p> <p>Even with implementation of these measures, the impact will remain significant and unavoidable.</p>	<p>Monitor compliance with revegetation and erosion control measures and report to CCRWQB, Monterey County, USACE, CDFG, and DWR.</p>		<p>Verbally report noncompliance within 24 hours from time applicant is first aware of the circumstance and submit written report within 5 days.</p> <p>Noncompliance reports will be made to the appropriate agency identified in the SWPPP and SPCC (Appendices K and R), to the U.S. EPA Emergency Response Branch, the Central Coast Regional Water Quality Control Board (CCRWQCB), and DWR.</p> <p>Post-construction monitoring will be conducted for ten years, and reports will be submitted to the agencies monthly.</p> <p>Revegetation monitoring will begin immediately following planting. Monitoring shall be conducted during years 1, 2, 3, and 5 following planting. For areas in which trees, saplings, poles, wands, or acorns are planted, monitoring shall also be conducted in the year 10 following planting. Reports will be submitted to the agencies after the conclusion of each annual monitoring period. A summary report will be submitted after year ten, the final year of monitoring.</p>	
<p><b>WR-2b:</b> To minimize, implement water quality protection measures in SWPPP (Appendix K) including, design geomorphologically stable channels</p>	<p>Monitor compliance with design specifications, bank stabilization measures and revegetation measures and</p>	<p>Applicant's Environmental Inspector and Project Engineer</p>	<p>Bank stabilization and erosion control measures will be monitored daily during construction in areas under</p>	<p>USFWS, CCRWQCB, USACE, CDFG, NMFS, and Monterey County Planning and Building</p>

## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
<p>following sediment excavation, form a wide river/creek channel following the 1921 contours along upper reaches. Create a bankfull channel designed to contain a two-year event; create a lowflow channel capable of passing median annual flows; limit grading when constructing channels.</p> <p>Stabilize channel banks using plant material, revegetation and other methods. Immediately after initial soil disturbance, install sediment barriers, straw bales, silt fences, sand bags, small catch basins, water bars, check dams, filter fabrics and conduct surface roughening to prevent sediment from entering river. Install diversion facility to settle turbid water before releasing downstream.</p> <p>Complete cleanup and installation of permanent erosion controls within 10 days of final construction. If reseeding or revegetating an area must be delayed more than 30 days prior to the perennial vegetation seeding season, then area must be mulched with 3 tons/acre of straw, or its equivalent, for a minimum of 100 feet on each side of the water body; adhere to permit requirements.</p> <p>Even with implementation of these measures, the impact will remain significant and unavoidable.</p>	<p>report to CCRWQCB, USEPA, NMFS, CDFG, USFWS, Monterey County, and DWR.</p>		<p>active construction or equipment operation, weekly in areas with no active construction or equipment operation, within 24-hours of each 0.5 inch or greater rainfall event, soil and weather conditions permitting. Reports of daily inspections will be submitted monthly to the agencies.</p> <p>Verbally report noncompliance within 24 hours from time applicant is first aware of the circumstance and submit written report within 5 days.</p> <p>Noncompliance reports will be made to the appropriate agency identified in the SWPPP and SPCC (Appendices K and R), to the U.S. EPA Emergency Response Branch, the Central Coast Regional Water Quality Control Board (CCRWQCB), and DWR.</p> <p>Revegetation monitoring will begin immediately following planting. Monitoring shall be conducted during years 1, 2, 3, and 5 following planting. For areas in which trees, saplings, poles, wands, or acorns are planted, monitoring shall also be conducted in the year 10 following planting. Reports will be submitted to the agencies after the conclusion of each</p>	<p>Inspection Department</p>

## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
			annual monitoring period. A summary report will be submitted after year ten, the final year of monitoring.	
WR-3b: Both the reconstructed channel and the new bypass channel will be designed to allow fish passage. The design will include runs and pools that reflect a geomorphically stable channel and the passage requirements for the fish.	Monitor compliance with design specifications, and report to CCRWQCB, USEPA, NMFS, CDFG, USFWS, Monterey County, and DWR.	Applicant's Project Engineer and Environmental Inspector	Monitor compliance with design specifications daily throughout construction. Submit monthly reports to agencies.	USFWS, CCRWQCB, USACE, CDFG, NMFS, and Monterey County Planning and Building Inspection Department
WR-4b: No mitigation is available.				
WR-7: The point of diversion will be operated to maintain fish passage flows in Carmel River in January through May while also providing the necessary water supply to the downstream community. Additional mitigation for the change in the point of diversion may be added by the State Water Resources Control Board (SWRCB) during the permit process.	Monitor compliance with operation of point of diversion and report to the SWRCB, NMFS, CDFG, USFWS, and DWR.	Applicant's Environmental Inspector	Monitor compliance with fish passage flows daily January through May and report monthly to the agencies during this time period.	SWRCB, NMFS, CDFG, USFWS
<b>4.3 Water Quality</b>				
WQ-1: Implement erosion control and water quality protection and monitoring BMPs in SVWPPP (Appendix K) including construct sediment barriers; use straw bales, silt fences, sandbags and water bars; adhere to permit requirements.	Monitor compliance with erosion control and water quality protection measures and report to CCRWQCB, Monterey County, USACE, CDFG, and DWR.	Applicant's Environmental Inspector and Project Engineer	During construction, inspect daily in areas under active construction or equipment operation, weekly in areas with no active construction or equipment operation, within 24-hours of each 0.5 inch or greater rainfall event, soil and weather conditions permitting. Reports of daily inspections will be submitted monthly to the	U.S. EPA, CCRWQCB, USACE, CDFG, Monterey County Planning and Building Inspection Department

## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
			<p>agencies.</p> <p>Verbally report noncompliance within 24 hours from time applicant is first aware of the circumstance and submit written report within 5 days. Reports will be made to the appropriate agency identified in the SWPPP and SPCC (Appendices K and R), to the U.S. EPA Emergency Response Branch and the CCRWQCB.</p> <p>Post-construction monitoring will be conducted for ten years, and reports will be submitted to the agencies monthly.</p>	
<p><b>WQ-2:</b> Implement erosion control and water quality protection and monitoring BMPs in SWPPP (Appendix K) including use small catch basins, filter fabrics, tarps and straw bales, maintain and monitor erosion control methods for effectiveness, adhere to permit requirements.</p>	<p>Monitor compliance with erosion control and water quality protection measures and report to CCRWQCB, Monterey County, USACE, CDFG, and DWR.</p>	<p>Applicant's Environmental Inspector and Project Engineer</p>	<p>During construction, inspect daily in areas under active construction or equipment operation, weekly in areas with no active construction or equipment operation, within 24-hours of each 0.5 inch or greater rainfall event, soil and weather conditions permitting. Reports of daily inspections will be submitted monthly to the agencies.</p> <p>Verbally report noncompliance within 24 hours from time applicant is first aware of the circumstance and submit written report within 5 days. Reports will be made to the appropriate agency identified in the SWPPP and SPCC (Appendices K and R), to the U.S. EPA Emergency</p>	<p>U.S. EPA, CCRWQCB USACE, CDFG, Monterey County Planning and Building Inspection Department</p>

## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
			Response Branch and the CCRWQCB.  Post-construction monitoring will be conducted for ten years, and reports will be submitted to the agencies monthly.	
<p><b>WQ-3:</b> Implement erosion control and water quality BMPs and monitoring methods in the SWPPP and SPCC (Appendices K and R) including refuel construction equipment and vehicles in designated area where spills can be contained, store fuels in double-contained areas capable of storing 150 percent of fuel volume, conduct truck and cement washdown outside the high water mark area, check and maintain equipment operated within high water mark to prevent leaks, daily remove litter and debris and properly dispose of, store all construction equipment in staging area at end of each day, adhere to permit requirements. Vehicles containing over 150 gallons of fuel will have a spill prevention plan and spill cleanup materials.</p>	<p>Monitor compliance with erosion control and water quality protection measures and report to CCRWQCB, Monterey County, USACE, CDFG, and DWR.</p>	<p>Applicant's Environmental Inspector and Project Engineer</p>	<p>During construction, inspect daily in areas under active construction or equipment operation, weekly in areas with no active construction or equipment operation, within 24-hours of each 0.5 inch or greater rainfall event, soil and weather conditions permitting. Reports of daily inspections will be submitted monthly to the agencies.</p> <p>Verbally report noncompliance within 24 hours from time applicant is first aware of the circumstance and submit written report within 5 days. Reports will be made to the appropriate agency identified in the SWPPP and SPCC (Appendices K and R), to the U.S. EPA Emergency Response Branch and the CCRWQCB.</p> <p>Post-construction monitoring will be conducted for one year, and reports will be submitted to the agencies monthly.</p>	<p>U.S. EPA, CCRWQCB USACE, CDFG, Monterey County Planning and Building Inspection Department</p>
<b>WQ-5:</b> Implement provisions of	Monitor compliance with	Applicant's	Daily monitor stream	USEPA, USACE,

## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
SWPPP (Appendix K) including designing pipeline for rapid transport of water around construction site and to minimize water heating; use white or reflective paint on pipeline; monitor stream temperatures, dissolved oxygen, and turbidity for NMFS and CDFG steelhead requirements; mix bypass flow with water from the upstream well point field if water temperatures in the Carmel River exceed criteria; adhere to permit conditions.	water quality protection measures and report to CCRWQB, Monterey County, USACE, CDFG, and DWR.	Environmental Inspector and Project Engineer	temperatures, D.O., and turbidity to meet NMFS and CDFG steelhead requirements. During construction: inspect daily in areas under active construction or equipment operation, weekly in areas with no active construction or equipment operation, within 24-hours of each 0.5 inch or greater rainfall event, soil and weather conditions permitting. Reports of daily inspections will be submitted monthly to the agencies.  Verbally report noncompliance within 24 hours from time applicant is first aware of the circumstance and submit written report within 5 days. Reports will be made to the appropriate agency identified in the SWPPP and SPCC (Appendices K and R), to the U.S. EPA Emergency Response Branch and the CCRWQCB.	NMFS, CDFG, CCRWQCB, Monterey County Planning and Building Inspection Department
WQ-6: Install energy dissipation structures where bypassed project water is discharged to prevent scouring, sedimentation and turbidity; adhere to permit requirements.	Monitor compliance with erosion control and water quality protection measures and report to CCRWQB, Monterey County, USACE, CDFG, and DWR.	Applicant's Environmental Inspector and Project Engineer	During construction, inspect daily in areas under active construction or equipment operation, weekly in areas with no active construction or equipment operation, within 24-hours of each 0.5 inch or greater rainfall event, soil and weather conditions permitting. Reports of daily inspections will be	USEPA, CCRWQCB, USACE, CDFG, Monterey County Planning and Building Inspection Department



## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
			<p>submitted monthly to the agencies.</p> <p>Verbally report noncompliance within 24 hours from time applicant is first aware of the circumstance and submit written report within 5 days. Reports will be made to the appropriate agency identified in the SWPPP and SPCC (Appendices K and R), to the U.S. EPA Emergency Response Branch and the CCRWQCB.</p>	
<p><b>WQ-7:</b> Implement erosion control and water quality protection and monitoring BMPs in SWPPP (Appendix K) including, use filter cloths or other fabric barriers, remove sand-sized and finer construction fill, and angular crushed rock, and dispose offsite at an appropriate location, adhere to permit conditions.</p>	<p>Monitor compliance with erosion control and water quality protection measures and report to CCRWQCB, Monterey County, USACE, CDFG, and DWR.</p>	<p>Applicant's Environmental Inspector and Project Engineer</p>	<p>During construction, inspect daily in areas under active construction or equipment operation, weekly in areas with no active construction or equipment operation, within 24-hours of each 0.5-inch or greater rainfall event, soil and weather conditions permitting. Reports of daily inspections will be submitted monthly to the agencies.</p> <p>Verbally report noncompliance within 24 hours from time applicant is first aware of the circumstance and submit written report within 5 days. Reports will be made to the appropriate agency identified in the SWPPP and SPCC (Appendices K and R), to the U.S. EPA Emergency Response Branch and the</p>	<p>USEPA, CCRWQCB, USACE, CDFG, Monterey County Planning and Building Inspection Department</p>

## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
			CCRWQCB.	
WQ-8: Implement erosion control and water quality protection and monitoring BMPs in SWPPP (Appendix K) including use settling basin and sedimentation tank located above ordinary high water zone, monitor discharge and receiving waters, return only clear water to stream, dispose of settled solids at appropriate site, discontinue discharge if effluent water quality doesn't meet criteria, implement additional filtration if necessary, adhere to all permit conditions.	Monitor compliance with erosion control and water quality protection measures and report to CCRWQB, Monterey County, USACE, CDFG, and DWR.	Applicant's Environmental Inspector and Project Engineer	<p>During construction, inspect daily in areas under active construction or equipment operation, weekly in areas with no active construction or equipment operation, within 24-hours of each 0.5 inch or greater rainfall event, soil and weather conditions permitting. Reports of daily inspections will be submitted monthly to the agencies.</p> <p>Verbally report noncompliance within 24 hours from time applicant is first aware of the circumstance and submit written report within 5 days. Reports will be made to the appropriate agency identified in the SWPPP and SPCC (Appendices K and R), to the U.S. EPA Emergency Response Branch and the CCRWQCB.</p> <p>Conduct post-construction monitoring until all water is discharged, settled solids are disposed of appropriately, and the settling basins are removed.</p>	USEPA, CCRWQCB, USACE, CDFG, Monterey County Planning and Building Inspection Department
WQ-9: To minimize water quality degradation, reduce rate of reservoir drawdown to 0.5 feet, or less, per day. Even with implementation of this measure, the impact will remain	Monitor compliance with drawdown rate and water quality protection measures and report to CCRWQB, Monterey County, USACE,	Applicant's Environmental Inspector and Project Engineer	Monitor daily during reservoir drawdown.	USEPA, CCRWQCB, USACE, NMFS, USFWS, CDFG, Monterey County Planning and Building

## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
significant and unavoidable.	CDFG, and DWR.			Inspection Department
<b>WQ-10:</b> No mitigation is available.				
<b>WQ-12:</b> Implement erosion control and water quality protection and monitoring BMPs in SWPPP (Appendix K) including, use small catch basins, filter fabrics, tarps and straw bales. Use filter cloths or other fabric barriers, remove sand-sized, and finer construction fill, and angular crushed rock, and dispose offsite at an appropriate location. Refuel construction equipment and vehicles in designated area where spills can be contained; store fuels in double-contained areas capable of storing 150 percent of fuel volume. Conduct truck and cement washdown outside of high water mark, check and maintain equipment operated within high water mark to prevent leaks. Daily remove litter and debris and dispose of properly, store all construction equipment in staging area at end of each day. Vehicles containing over 150 gallons of fuel will have a spill prevention plan and spill cleanup materials. Adhere to all permit conditions.	Monitor compliance with erosion control and water quality protection measures and report to CCRWQB, Monterey County, USACE, CDFG, and DWR.	Applicant's Environmental Inspector and Project Engineer	During construction, inspect daily in areas under active construction or equipment operation, weekly in areas with no active construction or equipment operation, within 24-hours of each 0.5 inch or greater rainfall event, soil and weather conditions permitting. Reports of daily inspections will be submitted monthly to the agencies.  Verbally report noncompliance within 24 hours from time applicant is first aware of the circumstance and submit written report within 5 days. Reports will be made to the appropriate agency identified in the SWPPP and SPCC (Appendices K and R), to the U.S. EPA Emergency Response Branch and the CCRWQCB.  Post-construction monitoring will be conducted for one year, and reports will be submitted to the agencies monthly.	USEPA, CCRWQCB, USACE, CDFG and Monterey County Planning and Building Inspection Department
<b>WQ-14:</b> Implement appropriate erosion control and water quality protection and monitoring BMPs in SWPPP and SPCC (Appendices K and R) including: use straw bales, silt fences, sandbags and water bars,	Monitor compliance with erosion control and water quality protection measures and report to CCRWQB, Monterey County, USACE, CDFG, and DWR.	Applicant's Environmental Inspector and Project Engineer	During construction, inspect daily in areas under active construction or equipment operation, weekly in areas with no active construction or equipment operation, within 24-	USEPA, CCRWQCB, USACE, NMFS, CDFG and Monterey County Planning and Building Inspection Department

## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
<p>small catch basins, filter cloths or other fabric barriers, and tarps to prevent sediment, other particulate matter and chemicals from entering the Carmel River or other surface and groundwater resources.</p> <p>Use blasting mats, as appropriate, and place fabric barriers on the ground in active construction and demolition areas to catch sediment and cement debris.</p> <p>Contractor will store fuel, petroleum products, potentially hazardous materials and raw materials in secondary containment structures in the construction yard. Construction yard will be at least 100 ft from the edge of all water bodies, 200 ft from all groundwater wells and 400 ft from all public wells. Bulk storage tanks will not be placed in areas subject to flooding or erosion. Restrict refueling, maintenance of construction equipment, and transfer of materials to cement mixer trucks to upland areas at least 100 ft from the edge of all water bodies and 150 ft from any water supply wells. Only the Environmental Inspector can approve refueling or transfer of materials within the restricted areas.</p> <p>Fuel and service truck drivers shall be responsible for controlling fuel operations, material transfers and spill prevention. A containment vessel and plastic sheeting will be placed under equipment before materials are</p>			<p>hours of each 0.5 inch or greater rainfall event, soil and weather conditions permitting. Reports of daily inspections will be submitted monthly to the agencies.</p> <p>Verbally report noncompliance within 24 hours from time applicant is first aware of the circumstance and submit written report within 5 days. Reports will be made to the appropriate agency identified in the SWPPP and SPCC (Appendices K and R), to the U.S. EPA Emergency Response Branch and the CCRWQCB.</p>	

## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
<p>removed or transferred. Equipment operators will be responsible for immediately reporting and mitigating spills. Contractor will maintain sufficient (at least 20 pounds) commercial absorbent and barrier materials at each construction yard. Equipment carrying over 150 gallons of fuel will carry individual spill prevention plans and will either carry materials sufficient to contain and clean up spills that may occur in transit or will be followed by a vehicle carrying sufficient response materials. All spills will be contained and cleaned up as soon as possible.</p> <p>Equipment will not be washed in any waterbody; at the end of each day, all construction equipment will be moved to the staging area above the high water mark. Litter and debris below the high watermark will be removed and appropriately disposed of daily; all other litter, debris, unused raw materials, equipment and supplies will be removed from the staging area at the end of the construction season.</p>				
<p><b>WQ-16:</b> Implement BMPs in the SWPPP including stabilizing sediment slopes and disturbed areas with sediment barriers, straw mulch and silt fences, providing sediment collection features such as silt bales and sandbags, establishing sediment traps along toe of the pile and other disturbed areas, monitoring erosion control methods for effectiveness and</p>	<p>Monitor compliance with sediment slope stabilization, erosion control and water quality protection measures and report to CCRWQCB, Monterey County, USACE, CDFG, and DWR.</p>	<p>Applicant's Environmental Inspector and Project Engineer</p>	<p>Slope stabilization, erosion control and water quality protection measures will be monitored daily during construction in areas under active construction or equipment operation, weekly in areas with no active construction or equipment operation, within 24-hours of each 0.5 inch or greater</p>	<p>USEPA, CCRWQCB, USACE, CDFG and Monterey County Planning and Building Inspection Department</p>

## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
<p>maintaining methods throughout construction operations, distributing a 2-foot layer of organic soil on sediment slope at the end of construction operations and seed, annually monitoring effectiveness of erosion protection methods in bypassed arm of Carmel River at the end of each rainy season for a period of 10 years, repairing or improving any erosion problems prior to the following rainy season using methods such as reinforcing sediment pile with rock and/or additional revegetation with native plants or trees.</p>	<p>Monitor compliance with revegetation measures and report to CCRWQB, Monterey County, USACE, CDFG, and DWR.</p>		<p>rainfall event, soil and weather conditions permitting. Reports of daily inspections will be submitted monthly to the agencies.</p> <p>Verbally report noncompliance within 24 hours from time applicant is first aware of the circumstance and submit written report within 5 days.</p> <p>Noncompliance reports will be made to the appropriate agency identified in the SWPPP and SPCC (Appendices K and R), to the U.S. EPA Emergency Response Branch, the Central Coast Regional Water Quality Control Board (CCRWQCB), and DWR.</p> <p>Post-construction monitoring will be conducted for ten years, and reports will be submitted to the agencies monthly.</p> <p>Revegetation monitoring will begin immediately following planting. Monitoring shall be conducted during years 1, 2, 3, and 5 following planting. For areas in which trees, saplings, poles, wands, or acorns are planted, monitoring shall also be conducted in the year 10 following planting. Reports will be submitted to the agencies after the conclusion of each annual monitoring period. A summary</p>	

## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
<p><b>WQ-17:</b> Implement BMPs in SWPPP and SPCC including installation of small catch basins, filter traps, tarps, or straw bale barriers. Refuel construction equipment and vehicles in paved, bermed, designated areas; store fuel in double-contained areas capable of holding 125 percent of the volume of fuel being stored. Conduct truck and cement equipment wash-down outside of ordinary channel high water mark. Check and maintain equipment daily to prevent leaks of fuel, lubricants, or other fluids to the stream. Remove litter and construction debris from within the high water mark daily and dispose of appropriately; remove litter and construction debris outside the high water mark at end of construction season. Move all construction equipment to staging area to prevent accidental spills; vehicles carrying over 150 gallons of fuel will have a spill prevention plan and materials required to clean up a spill. Use filter cloth or other fabric barrier placed on ground of active construction area to catch fine sediments, dispose of sand-sized and finer construction fill and any angular crushed rock at an appropriate off-site location. Use blasting mats to catch and direct flying rock and debris; dispose of blasted material at appropriate on-site location in Carmel</p>	<p>Monitor compliance with erosion control and water quality protection measures and blasting measures and report to CCRWQB, Monterey County, USACE, CDFG, and DWR.</p>		<p>report will be submitted after year ten, the final year of monitoring.</p> <p>Compliance with the Blasting Plan will be monitored throughout blasting activities. Erosion control and water quality protection measures will be monitored daily during construction in areas under active construction or equipment operation, weekly in areas with no active construction or equipment operation, within 24-hours of each 0.5 inch or greater rainfall event, soil and weather conditions permitting. Reports of daily inspections will be submitted monthly to the agencies.</p> <p>Verbally report noncompliance within 24 hours from time applicant is first aware of the circumstance and submit written report within 5 days.</p> <p>Noncompliance reports will be made to the appropriate agency identified in the SWPPP and SPCC (Appendices K and R), to the U.S. EPA Emergency Response Branch, the Central Coast Regional Water Quality Control Board (CCRWQCB), and DWR.</p>	<p>USEPA, CCRWQCB, USACE, CDFG and Monterey County Planning and Building Inspection Department</p>

## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
River arm of reservoir.				
<b>4.4 Fisheries</b>  FI-1: Limit tree and limb removal, implement measures to prevent roadfill from entering streams, revegetate streambanks, implement measures in SWPPP and Botanical Resources Management Plan (Appendices K and U). Use blasting mats and temporary walls to prevent rock fall and debris from entering river, implement BMPs to minimize sedimentation and turbidity, place roadfill on fabric or rubber liner, face roadfill with boulders or riprap sized too large for river to move during flood flows, implement erosion control and road drainage plan to eliminate aquatic impacts due to sedimentation and turbidity, revegetate disturbed areas. In the event of forecasted heavy participation, all temporary erosion control devices needing repair or installation will be immediately installed or repaired.	<p>Monitor compliance with tree removal erosion control and water quality protection measures, and compliance with Blasting Plan and report to CCRWQB, Monterey County, USACE, CDFG, and DWR.</p> <p>Monitor compliance with revegetation measures and report to CCRWQB, Monterey County, USACE, CDFG, and DWR.</p>	Applicant's Environmental Inspector and Project Engineer	<p>Compliance with the Blasting Plan will be monitored throughout blasting activities.</p> <p>Throughout construction, for erosion control, water quality protection and in temporary and permanent revegetated areas, inspect daily in areas under active construction or equipment operation, weekly in areas with no active construction or equipment operation, in all areas within 24-hours of each 0.5-inch or greater rainfall event, soil and weather conditions permitting. Reports of daily inspections will be submitted monthly to the agencies.</p> <p>Environmental Inspector will document all inspections in Environmental Daily Inspection Report Verbally report noncompliance within 24 hours from time applicant is first aware of aware of the circumstance and submit written report within 5 days. Reports will be made to the appropriate agency identified in</p>	USEPA, USACE, NMFS, USFWS, CCRWQCB, CDFG and Monterey County Planning and Building Inspection Department



## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
			<p>the SWPPP and SPCC (Appendices K and R), to the U.S. EPA Emergency Response Branch, and the CCRWQCB.</p> <p>Post-construction monitoring will be conducted for ten years, and reports will be submitted to the agencies monthly.</p> <p>Revegetation monitoring will begin immediately after planting. Following planting, monitoring will be conducted during years 1, 2, 3, and 5. For areas in which trees, saplings, poles, wands, or acorns are planted, monitoring will also be conducted in the year 10 following planting. Reports will be submitted to the agencies after the conclusion of each annual monitoring period. A summary report will be submitted after the final year of monitoring.</p>	
<p>FI-2: To minimize impacts, fish will be captured from affected reaches and relocated to sections of the Carmel River that would support them. Fish will be rescued by using block nets, seines and dip nets. Backpack electrofishing units will be used if bottom topography makes use of nets ineffective. Electrofishing would follow guidelines established by NMFS (2000).</p>	<p>Monitor fish capture and relocation efforts especially in terms of compliance with permit conditions and report to CDFG, USFWS, NMFS, CCRWQCB, and DWR.</p>	<p>Applicant's Environmental Inspector</p>	<p>Monitor fish capture and relocation efforts, daily, during water diversion and report to the agencies as specified in permits.</p>	<p>NMFS, USFWS, CCRWQCB, CDFG and MPWMD</p>

MITIGATION MONITORING AND REPORTING PROGRAM				
MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
<p>Streamflow from the Carmel River upstream of SCD will be directed into flex pipes and inflowing water would be diverted around the plunge pool and the section of river to be dewatered. Once flow is diverted out of the channel, water levels would be reduced in the plunge pool and other sections of the river by pumping. Once water levels are lowered in a section of river, a fish rescue will begin and will continue until all possible fish are removed from the dewatered reach. Fish rescue will be completed prior to complete dewatering of a reach. Crews will search for stranded fish during the final phases of dewatering. Captured fish will be temporarily held in aerated coolers for transport. Rescued fish will be transported downstream and released into the Carmel River near the Carmel Valley Filler Plant or moved to the SHSRF if rearing capacity in the downstream release site is already at maximum capacity. Water quality would be protected during construction by implemented measures in the SWPPP.</p> <p>Even with implementation of these measures, the impact will remain significant and unavoidable.</p>	<p>Monitor compliance with water quality protection measures and report to CCRWQB, Monterey County, USACE, CDFG, and DWR.</p>		<p>Compliance with water quality protection BMPs, will be inspected daily in areas under active construction or equipment operation, weekly in areas with no active construction or equipment operation, within 24-hours of each 0.5 inch or greater rainfall event, soil and weather conditions permitting. Reports of daily inspections will be submitted monthly to the agencies.</p> <p>Verbally report noncompliance within 24 hours from time applicant is first aware of the circumstance and submit written report within 5 days. Reports will be made to the appropriate agency identified in the SWPPP and SPCC (Appendices K and R), to the U.S. EPA Emergency Response Branch and the CCRWQCB.</p>	NMFS, USFWS, CCRWQCB, CDFG, and MPWMD
<p>FI-4: To minimize impacts, fish traps will be installed upstream of diversion points to capture downstream migrating fish so they can be</p>	<p>Monitor fish capture and relocation efforts especially in terms of compliance with permit conditions and report</p>	<p>Applicant's Environmental Inspector</p>	<p>Monitor fish capture and relocation efforts, daily, during water diversion and report to the agencies as specified in permits.</p>	

## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
<p>transported around the diversion and continue downstream. Fish will be rescued from the diversion sites prior to constructing the diversion structures. Once the sheet piles are installed and the diversion pipes connected, water would be diverted into the pipes. Flow in the river channel downstream of the diversion will be reduced and the reduction in flow would facilitate fish rescues. A fish rescue would occur in the Carmel River and San Clemente Creek channels between the diversion point and the reservoir. Block nets would be set near the mouth of each stream to prevent fish from moving upstream of the reservoir. Once all fish are rescued from the channels, all flow would be directed into the bypass pipes.</p> <p>Even with implementation of these measures, the impact will remain significant and unavoidable.</p>	<p>to CDFG, USFWS, NMFS, CCRWQB, and DWR.</p>			
<p><b>FI-5:</b> During reservoir dewatering, nets will be installed across the channels leading into the reservoir to prevent fish from swimming upstream into the Carmel River and San Clemente Creek. A fish rescue will occur in the reservoir during drawdown. Fish will be captured using large and small seines and dip nets. Backpack electrofishing units will be used if needed. Electrofishing would follow guidelines established by NMFS (2000). Rescued fish will be relocated to other suitable habitat downstream of</p>	<p>Monitor fish capture and relocation efforts especially in terms of compliance with permit conditions and report to CDFG, USFWS, NMFS, CCRWQB, and DWR.</p> <p>Monitor compliance with water quality protection measures and report to CCRWQB, Monterey County, USACE, CDFG, and DWR.</p>	<p>Applicant's Environmental Inspector</p>	<p>Monitor fish capture and relocation efforts, daily, during water diversion and report to the agencies as specified in permits.</p> <p>Compliance with water quality protection BMPs, will be inspected daily in areas under active construction or equipment operation, weekly in areas with no active construction or</p>	<p>NMFS, USFWS, CCRWQB, CDFG and MPWMD</p>

MITIGATION MONITORING AND REPORTING PROGRAM				
MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
<p>OCRD in the Carmel River. During dewatering, water quality in the river would be protected by implementing measures in the SWPPP and SPCC (Appendices K and R).</p> <p>Even with implementation of these measures, the impact will remain significant and unavoidable.</p>			<p>equipment operation, within 24-hours of each 0.5 inch or greater rainfall event, soil and weather conditions permitting. Reports of daily inspections will be submitted monthly to the agencies.</p> <p>Verbally report noncompliance within 24 hours from time applicant is first aware of the circumstance and submit written report within 5 days. Reports will be made to the appropriate agency identified in the SWPPP and SPCC (Appendices K and R), to the U.S. EPA Emergency Response Branch and the CCRWQCB.</p>	
<p><b>FI-6:</b> To minimize impacts, fish rescue and relocation will be implemented.</p> <p>To control turbidity caused by construction near roads, stream crossings and bridges, implement erosion control methods and BMPs in SWPPP (Appendix K) including: Place no fill on canyon walls above river; use retaining walls; adequately size and locate erosion control facilities; use filter fabrics, berms, hay bales and other erosion control methods; monitor and maintain erosion control methods throughout implementation period; construct spill and spoil areas to</p>	<p>Monitor fish capture and relocation efforts especially in terms of compliance and report permit conditions and report to CDFG, USFWS, NMFS, CCRWQCB, and DWR.</p> <p>Monitor compliance with water quality protection measures and report to CCRWQCB, Monterey County, USACE, CDFG, and DWR.</p>	Applicant's Environmental Inspector and Project Engineer	<p>Monitor fish capture and relocation efforts, daily, during water diversion and report to the agencies as specified in permits.</p> <p>Erosion control and water quality protection measures will be monitored daily during construction in areas under active construction or equipment operation, weekly in areas with no active construction or equipment operation, within 24-hours of each 0.5 inch or greater rainfall event, soil and weather conditions permitting. Reports of daily inspections will be submitted monthly to the</p>	USEPA, USACE, NMFS, USFWS, CCRWQCB, CDFG and Monterey County Planning and Building Inspection Department

## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
<p>prevent silt and clay erosion; control surface drainage from cut, fill, borrow, and disposal areas; inspect cut slopes to prevent slope failures and temporary wall rock raveling; use blasting mats to capture and direct rock debris; erect temporary walls adjacent to existing access road to contain blasted rock; permanently revegetate disturbed areas immediately after completing road improvements; if necessary, implement temporary revegetation and erosion control; install over-wintering protection to prevent undermining or washout.</p>			<p>agencies. Verbally report noncompliance within 24 hours from time applicant is first aware of the circumstance and submit written report within 5 days. Noncompliance reports will be made to the appropriate agency identified in the SWPPP and SPCC (Appendices K and R), to the U.S. EPA Emergency Response Branch, the Central Coast Regional Water Quality Control Board (CCRWWQCB), and DWR.</p>	
<p>To mitigate turbidity impacts during reservoir construction activities: moderate rate of reservoir drawdown by routing reservoir inflow through a pipeline; dewater reservoir to 510 feet then open lower level valve; regulate releases into lower river to minimize turbidity impacts; use mobile filter plant to treat highly turbid water before releasing to river.</p> <p>River temperatures downstream of dam should not increase by more than 1 to 2 degrees Celsius over water temperature upstream of the sheet-pile water diversion. To mitigate temperature impacts: schedule reservoir dewatering during cool part of year and during night and early part of day; as water level lowers and surface temperature rises, switch from</p>				

## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
<p>surface releases to release from well points; reduce thermal loading in diversion pipes by placing pipes in shaded locations, burying pipe under a sand layer, covering with burlap or shade cloth, or painting pipe white if it cannot be shaded.</p> <p>To mitigate dissolved oxygen impacts: aerate water as it leaves the diversion pipes or use a mechanical aerator prior to releasing water into river; during reservoir drawdown, employ mechanism to aerate water as it descends from dam into the river; aerate water pumped from reservoir or released from well points prior to discharge into river.</p>				
<p>FI-10: Minimum flows are addressed in the current MOU between MPWMD, CDFG, NMFS, and CAW and are based on available upstream storage in Los Padres Reservoir, the water year type and water demand. A similar plan will be developed for this project in conjunction with NMFS Fisheries, CDFG, SWRCB, and the MPWMD. The plan will provide flows for steelhead habitat in the reach of the river affected by the new point of diversion. The point of diversion will be operated to maintain fish passage flows in Carmel River in January through May while also providing the necessary water supply to the downstream community. Additional mitigation for the change in the point of diversion may be added by the State</p>	<p>Monitor compliance with operation of point of diversion and report to the SWRCB, NMFS, CDFG, USFWS, and DWR.</p>	<p>Applicant's Environmental Inspector</p>	<p>Monitor compliance with fish passage flows daily January through May and report monthly to the agencies during this time period.</p>	<p>SWRCB, NMFS, CDFG, USFWS</p>

## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
Water Resources Control Board (SWRCB) during the permit process.				
FI-13: No mitigation is available.				
FI-15: To offset poor water quality at the Sleepy Hollow Steelhead Rearing Facility, during construction and operations into the future, an alternative supply, such as from the Russell Wells, will be provided.	Monitor water quality and report to MPWMD, CCRWQCB, and DWRs.	Applicant and Applicant's Environmental Inspector	Throughout construction and during future operations, from early summer to winter or late spring, monitor water quality daily during active construction, equipment-related operations. Submit monthly reports to agencies.	MPWMD, CCRWQCB
<b>4.5 Vegetation and Wildlife</b>				
VE-1: Avoid populations of CNPS List 4 plant species to the extent possible	Report any losses to CNPS List 4 species.	Applicant and Applicant's Environmental Inspector	During construction.	CDFG, Monterey County
VE-2: Confine access improvement activities to north side of existing road; fence blue oak stand on south side of road to prevent construction encroachment. Implement measures in Botanical Resources Management Plan (Appendix U) including: under supervision of a qualified botanist, replace up to half the removed oaks with seedlings or potted oaks at 3:1 ratio; replant trees that don't survive; derive all plant material from Carmel Valley area oak populations. To ensure long-term survival, take remedial action such as irrigation or protection from browsing animals per Monterey County Code Title 16, Chapter 16.6; provide or acquire a	Monitor compliance with vegetation protection measures and report to Monterey County, CDFG, and DWR.  Monitor revegetation plantings and report to Monterey County, CDFG, and DWR.	Applicant and Applicant's Environmental Inspector	Monitor activities daily during construction for construction encroachment impacts. During construction, conduct monitoring annually on all revegetated areas and areas and areas identified for potential erosion and sedimentation problems; implement monitoring immediately following planting; monitor during years 1,2,3, and 5 following planting; for areas in which trees, saplings, poles, wands, or acorns are planted, also monitor in year 10 following planting.  Reports will be submitted to the	Monterey County, CDFG

## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
conservation easement sufficient to mitigate at least half the oak tree loss per Monterey County Code. Adhere to all permit conditions.			agencies after the conclusion of each annual monitoring period. A summary report will be submitted after year ten, the final year of monitoring.	
<p>VE-3: Design project features to minimize loss of native vegetation; limit damage to roots of trees; implement erosion and sedimentation control methods; minimize alteration of flows and subsequent bank erosion; limit dust deposition on roadside vegetation; avoid alteration of hydrology supporting riparian forest habitat on adjacent floodplain; irrigate alders on reservoir fringe during reservoir dewatering; irrigate riparian vegetation above bypass outflow. Implement pre-construction and construction BMPs; all personnel involved in project shall attend environmental training addressing erosion and sediment control requirements, proper clearing and grading methods, and importance of protecting vegetation resources. To the maximum extent possible, use existing disturbed area or areas of annual grassland as a staging area; use fencing to prevent encroachment of vehicles or other project activity into native habitat or into the dripline of native trees outside of designated areas.</p>	Monitor compliance with vegetation protection measures and report to Monterey County, CDFG, and DWR.	Applicant's Environmental Inspector	<p>During construction, conduct monitoring annually on all revegetated areas and areas identified for potential erosion and sedimentation problems; implement monitoring immediately following planting; monitor during years 1,2,3, and 5 following planting; for areas in which trees, saplings, poles, wands, or acorns are planted, also monitor in year 10 following planting.</p> <p>Reports will be submitted to the agencies after the conclusion of each annual monitoring period. A summary report will be submitted after year ten, the final year of monitoring.</p> <p>Throughout construction, for erosion control, water quality protection and temporary and permanent revegetated areas inspect as follows: inspect daily in areas under active construction or equipment operation, weekly in areas with no active construction or equipment operation, in all areas within 24-hours of each 0.5 inch or greater rainfall event, soil and weather conditions permitting.</p>	Monterey County, CDFG, CCRWQCB, USACE



## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
<p>Under supervision of a qualified botanist, replace up to half the removed oaks with seedlings or potted oaks at 3:1 ratio; replant trees that don't survive; derive all plant material from Carmel Valley area oak populations. To ensure long-term survival, take remedial action such as irrigation, or protection from browsing animals per MCC Title 16, Chapter 16.6. Provide or acquire a conservation easement sufficient to mitigate at least half the oak tree loss per Monterey County Code.</p> <p>Implement measures in the Botanical Resources Management Plan (Appendix U); adhere to permit requirements.</p>	<p>Monitor revegetation plantings and report to Monterey County, CDFG, and DWR.</p>		<p>Reports of daily inspections will be submitted monthly to the agencies.</p> <p>Environmental Inspector shall document all inspections in Environmental Daily Inspection Report. Verbally report noncompliance within 24 hours from time applicant is first aware of the circumstance and submit written report within 5 days. Reports will be made to the appropriate agency identified in the SWPPP and SPCC (Appendices K and R), to the U.S. EPA Emergency Response Branch and the CCRWQCB.</p> <p>Post-construction monitoring will be conducted for ten years, and reports will be submitted to the agencies monthly.</p>	
<p>VE-4: Implement erosion and sedimentation control BMPs in SWPPP (Appendix K) for all grading, filling, vegetation clearing or excavating; design road widening to avoid placing fill above canyon walls; with a qualified hydrologist, design all road widening and improvements to avoid or minimize alteration of existing drainage patterns; employ appropriate erosion control technology; conduct construction work during dry season; avoid excavation and operation of construction vehicles within tree driplines; implement dust control measures including watering unpaved</p>	<p>Monitor compliance with vegetation protection measures and erosion and sediment control BMPs and report to Monterey County, CDFG, CCRWQCB, and DWR.</p> <p>Monitor revegetation plantings and report to Monterey County, CDFG, and DWR.</p>	<p>Applicant's Environmental Inspector, Hydrologist, Revegetation Specialist</p>	<p>During construction, conduct monitoring annually on all revegetated areas and areas identified for potential erosion and sedimentation problems; implement monitoring immediately following planting; monitor during years 1,2,3, and 5 following planting; for areas in which trees, saplings, poles, wands, or acorns are planted, also monitor in year 10 following planting.</p> <p>Reports will be submitted to the agencies after the conclusion of each annual monitoring period. A</p>	<p>Monterey County, CDFG, CCRWQCB, USACE</p>

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
<p>access roads; with qualified revegetation specialist, revegetate disturbed areas with seed mix containing as high a percentage of native seeds as possible; implement remedial actions if revegetation is unsuccessful or if significant erosion and sedimentation is observed during monitoring; implement strategies in Botanical Resources Management Plan (Appendix U); adhere to all permit conditions.</p>			<p>summary report will be submitted after year ten, the final year of monitoring.</p> <p>Throughout construction, for erosion control, water quality protection and temporary and permanent revegetated areas inspect as follows: inspect daily in areas under active construction or equipment operation, weekly in areas with no active construction or equipment operation, in all areas within 24-hours of each 0.5 inch or greater rainfall event, soil and weather conditions permitting. Reports of daily inspections will be submitted monthly to the agencies.</p> <p>Environmental Inspector shall document all inspections in Environmental Daily Inspection Report. Verbally report noncompliance within 24 hours from time applicant is first aware of the circumstance and submit written report within 5 days. Reports will be made to the appropriate agency identified in the SWPPP and SPCC (Appendices K and R), to the U.S. EPA Emergency Response Branch, and the CCRWQCB. Post-construction monitoring will be conducted for ten years, and reports will be submitted to the agencies monthly.</p>	

## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
<p><b>WI-2:</b> Conduct preconstruction surveys followed by consultation with agencies. Other measures include establishing buffer zones or installation of exclusion barriers under the supervision of a qualified bat biologist. If possible, schedule structure removal after juvenile bats are weaned and capable of flight as determined by a qualified bat biologist.</p>	<p>Report preconstruction survey results to CDFG, USFWS, and DWR.</p>	<p>Applicant's Environmental Inspector</p>	<p>Report survey results to the agencies immediately upon survey completion.</p>	<p>USFWS, CDFG</p>
<p><b>WI-3:</b> To minimize, conduct preconstruction surveys; rescue and relocate CRLF, western pond turtle, and other aquatic special-status species; erect barrier to prevent movement of frogs back into work area; have biological monitor accompany crew during excavation and installation of barrier to prevent harm to species active along barrier route; restore CRLF habitat sites; implement CRLF Population Monitoring and Bullfrog Eradication Program in cooperation with the USFWS and CDFG. Capture and relocate western pond turtles to nearby downstream ponds or pools; erect construction fencing to prevent turtles from returning to construction area. For duration of cofferdam construction, use biological monitor to facilitate safe removal and relocation of special-status species such as CRLF, western pond turtles, and two-striped garter snake. Two-striped garter snakes will be relocated at least one-quarter mile downstream to</p>	<p>Report results of preconstruction surveys to CDFG, USFWS, and DWR. Monitor rescue and relocation, and bullfrog eradication activities and report results to CDFG, USGWS, and DWR.</p>	<p>Applicant's Field Contact Representative, or Authorized Biologist</p>	<p>Report results of preconstruction surveys immediately after completion. Report encounters with special-status species to authorized biologists; report finding dead or injured special-status species to CDFG and USFWS within 3 days. Within 60 days of completing construction activities for the season, submit special-status species report.</p>	<p>CDFG, USFWS</p>

## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
<p>prevent predation on other special status species. Implement provisions in Appendix V (Protection Measures for Special-Status Species).</p> <p>Even with implementation of these measures, the impact will remain significant and unavoidable.</p>				
<p><b>WI-4:</b> Conduct protocol-level surveys for California red-legged frog, and other special-status aquatic species on Carmel River to about one-half mile downstream of the Old Carmel River Dam; if work on dam is interrupted for more than two weeks, repeat initial surveys; notify USFWS if CRLF are observed; USFWS-approved biologist will capture and relocate CRLF to nearby, suitable habitat; if necessary, survey and relocation programs will be modified to comply with USFWS Biological Opinion; consult with USFWS if other special-status species are located; adhere to permit conditions.</p>	<p>Report results of protocol-level surveys to CDFG, USFWS, and DWR.</p> <p>Monitor rescue and relocation, and bullfrog eradication activities and report results to CDFG, USGWS, and DWR.</p>	<p>Applicant's Environmental Inspector, or Authorized Biologist</p>	<p>Report results of preconstruction surveys immediately after completion; comply with monitoring and reporting schedule as specified in the USFWS Biological Opinion and CDFG consultation.</p>	<p>CDFG, USFWS</p>
<p><b>WI-8:</b> Conduct vegetation removal between Aug 1-Mar 1 after completion of preconstruction surveys. If vegetation must be removed outside of this timeframe, contact regulatory agencies; conduct additional preconstruction surveys; implement avoidance measures for special-status and protected (MBTA and raptor) species, including isolating active nests in a species-specific buffer area and avoiding area until birds have</p>	<p>Report results of preconstruction surveys to CDFG, USFWS, Monterey County, and DWR. Monitor vegetation removal. If removal must occur outside of the August 1 through March period, conduct additional surveys and report results to CDFG, USFWS, Monterey County, and DWR.</p>	<p>Applicant's Field Contact Representative, or Environmental Inspector</p>	<p>Report results of all survey immediately after completion. Report encounters with special-status species and protected birds to authorized biologists; report finding dead or injured special-status species and birds within 3 days. Within 60 days of completing construction activities for the season, submit special-status species report; comply with monitoring and reporting schedule as specified by</p>	<p>USFWS, CCRWQCB, CDFG, CDFG and Monterey County Planning and Building Inspection Department</p>

## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
fledged.			USFWS and CDFG.	
<p><b>WI-9:</b> Minimize tree removal to number necessary to allow construction access; use GPS to map and flag known active woodrat nests along route; conduct surveys to identify other active woodrat nests; plan routes to avoid woodrat nests; have bat expert conduct preconstruction surveys of rock outcrops and other formations to determine presence of possible roosts; use GPS to map roosts; route construction to avoid roosts; implement erosion and sedimentation control BMPs (SWPPP, Appendix K) to avoid and minimize impacts to CRLF, foothill yellow-legged frogs, western pond turtles and two-striped garter snake along Carmel River; implement strategies in the Protection Measures for Special-status Species (Appendix V); comply with permit conditions.</p>	<p>Monitor compliance with measures in Appendix V and erosion and sediment control measures and report to CDFG, USFWS, CCRWQCB, Monterey County and DWR.</p> <p>Report preconstruction survey results to USFWS, CDFG, and DWR.</p>	<p>Applicant and Applicant's Environmental Inspector</p>	<p>Report preconstruction survey results to agencies immediately after survey completion.</p> <p>Throughout construction, for erosion control, water quality protection and temporary and permanent revegetated areas inspect as follows: inspect daily in areas under active construction or equipment operation, weekly in areas with no active construction or equipment operation, in all areas within 24-hours of each 0.5 inch or greater rainfall event, soil and weather conditions permitting. Reports of daily inspections will be submitted monthly to the agencies.</p> <p>Environmental Inspector shall document all inspections in Environmental Daily Inspection Report. Verbally report noncompliance within 24 hours from time applicant is first aware of the circumstance and submit written report within 5 days. Reports will be made to the appropriate agency identified in the SWPPP and SPCC (Appendices K and R), to the U.S. EPA Emergency Response Branch and the CCRWQCB.</p> <p>Post-construction monitoring will</p>	<p>USFWS, CDFG, CCRWQCB, and Monterey County Planning and Building Inspection Department</p>

MITIGATION MONITORING AND REPORTING PROGRAM				
MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
<p><b>WI-10:</b> To minimize, obtain and comply with permits from USFWS and CDFG. Implement provisions in the Protection Measures for Special Status Species (Appendix V). Under direction of a biologist permitted and approved by CDFG, USFWS and NMFS to capture and relocate CRLF, western pond turtles, two-striped garter snakes and other species, conduct preconstruction surveys for special status and native species consistent with recent USFWS and CDFG guidance. Notify agencies if special status species are observed; capture and relocate special status aquatic species after April 15; install erosion control fencing or similar barrier to minimize movement back into work areas; clear vegetation by hand; restore CRLF habitat; conduct CRLF population monitoring and predator control program in compliance with Fish and Game Code throughout project construction and continuing for 2 years after completion of project. If monitoring shows increase in bullfrog population and decrease in CRLF numbers in mitigation areas, eradication program may continue another 2 years. Transport and relocate other native wildlife to secure habitats; continue these mitigation measures throughout reservoir drawdown, vegetation</p>	<p>Monitor capture and relocation efforts especially in terms of compliance with permit conditions and report to CDFG, USFWS, NMFS, and DWR.</p> <p>Monitor bullfrog and CRLF populations and report to USFWS and CDFG.</p>	<p>Applicant and Applicant's Environmental Inspector</p>	<p>be conducted for ten years, and reports will be submitted to the agencies monthly.</p> <p>Monitor capture and relocation efforts, daily, and report to the agencies as specified in permits.</p> <p>Monitor and report results of bullfrog and CRLF populations as specified in the bullfrog eradication program.</p>	<p>NMFS, USFWS, CDFG</p>

## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
clearing, and sediment excavation operations. Even with implementation of these measures, the impact will remain significant and unavoidable.				
<p><b>WI-11:</b> To minimize, obtain and comply with permits from USFWS and CDFG; implement provisions in the Protection Measures for Special Status Species; clear vegetation with handheld tools (except "weedwhackers") prior to sediment excavation and rescue/relocation of CRLF; vegetation clearing will be limited to no lower than 12 inches above grade; cleared vegetation moved to an off-site location; under direction of a biologist permitted and approved by CDFG, USFWS and NMFS to capture and relocate CRLF, western pond turtles, two-striped garter snakes, Coast Range newt and other species, after hand clearing is complete, conduct preconstruction surveys for special status and native species consistent with recent USFWS and CDFG guidance; notify agencies if special status are observed; capture and relocate species after April 15; install erosion control fencing or similar barrier to minimize movement back into work areas; after ten days pass in which no special status aquatic adults, juveniles, hatchlings or larvae are detected, machine operations and mechanical vegetation removal can commence; after mechanical</p>	<p>Conduct preconstruction surveys and report to CDFG, USFWS, NMFS, and DWR. Monitor vegetation clearing activities and report to CDFG, USFWS, and DWR. Monitor capture and relocation efforts especially in terms of compliance with permit conditions and report to CDFG, USFWS, NMFS, and DWR.  Monitor bullfrog and CRLF populations and report to USFWS and CDFG.</p>	Applicant and Applicant's Environmental Inspector	<p>Report preconstruction survey and vegetation clearing results to agencies immediately after completion of activities.  Immediately notify agencies if special-status species are detected during vegetation clearing.  Monitor capture and relocation efforts, daily, and report to the agencies as specified in permits.  Monitor and report results of bullfrog and CRLF populations as specified in the bullfrog eradication program.</p>	NMFS, USFWS, CDFG

## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
<p>vegetation removal is complete, aquatic habitat will be resurveyed for presence of special status species; if no adults, juveniles, hatchlings, or larvae are present, sediment excavation can commence; repeat procedures at beginning of each construction season; restore CRLF habitat; conduct CRLF population monitoring and predator control program in compliance with Fish and Game Code throughout project and continuing for 2 years after completion of project; if construction monitoring shows increase in bullfrog population and decrease in CRLF numbers in mitigation areas, eradication program may continue another 2 years; transport and relocate other native wildlife to secure habitats; continue these mitigation measures throughout reservoir drawdown, vegetation clearing, and sediment excavation operations.</p> <p>Even with implementation of these measures, the impact will remain significant and unavoidable.</p>				
<p><b>WI-13:</b> To minimize, obtain and comply with permits from USFWS and CDFG; implement provisions in the Protection Measures for Special Status Species (Appendix V). Under direction of a biologist permitted and approved by CDFG, USFWS and NMFS to capture and relocate special status aquatic and terrestrial species including CRLF, Coast Range newt,</p>	<p>Monitor compliance with measures in Appendix V and erosion and sediment control measures and report to CDFG, USFWS, and DWR. Conduct preconstruction surveys and report to CDFG, USFWS, NMFS, and DWR.</p>	<p>Applicant and Applicant's Environmental Inspector</p>	<p>Report preconstruction survey results to agencies immediately after completion of activities. Immediately notify agencies if special-status species are detected.</p>	<p>NMFS, USFWS, CDFG</p>



## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
western pond turtle and Monterey duskyfooted woodrat, conduct preconstruction surveys for special status and native species consistent with most recent USFWS and CDFG guidance; notify agencies if special status species are observed; capture and relocate special status aquatic species after April 15; install erosion control fencing or similar barrier to minimize movement back into work areas; clear vegetation by hand; restore CRLF habitat; conduct CRLF population monitoring and predator control program in compliance with Fish and Game Code throughout project construction and continuing for 2 years after completion of project; if monitoring shows increase in bullfrog population and decrease in CRLF numbers in mitigation areas, eradication program may continue another 2 years; transport and relocate other native wildlife to secure habitats; continue these mitigation measures throughout reservoir drawdown, vegetation clearing, and sediment excavation operations.  Even with implementation of these measures, the impact will remain significant and unavoidable.	Monitor capture and relocation efforts especially in terms of compliance with permit conditions and report to CDFG, USFWS, NMFS, and DWR.  Monitor bullfrog and CRLF populations and report to USFWS and CDFG		Monitor capture and relocation efforts, daily, and report to the agencies as specified in permits.  Monitor and report results of bullfrog and CRLF populations as specified in the bullfrog eradication program.	
<b>4.6 Wetlands</b>				
<b>WET-1:</b> Implement revegetation immediately after completion of Phase 1 construction; create or restore lost riparian and fringe palustrine emergent wetlands, similar in function	Monitor compliance with measures in Appendix U and report to CDFG, USACE, Monterey County and DWR.	Applicant and Applicant's Environmental Inspector	During construction, conduct monitoring annually on all revegetated areas and areas identified for potential erosion	USACE, CDFG, Monterey County

MITIGATION MONITORING AND REPORTING PROGRAM				
MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
(streamside habitat) at a 3:1 ratio; grade as necessary. Under supervision of qualified botanist, place cuttings or seedlings in appropriate habitat; obtain seedlings from Carmel Valley area populations; replant seedlings as necessary to ensure long-term survival; for Other Waters of the U.S., may also improve stream channel habitat on Carmel River upstream of project area or along other appropriate streams in watershed; obtain conservation easement or mitigation banking credits at a 3:1 ratio on similar, unaffected and fully functional wetlands in the watershed; comply with specifications of the USACE 404 permit. Implement provisions in the Botanical Resources Management Plan (Appendix U).	Monitor revegetation plantings and report to USACE, Monterey County, CDFG, and DWR.		and sedimentation problems.  Monitor and record success of wetland restoration, annually. At end of three years, submit status report to USACE. Report shall include percent cover achieved and will identify all problem areas. If the performance criteria are not met, status reports will be submitted annually until criteria are met.  Monitor replacement plantings during years 1, 2, 3 and 5 following planting; for areas where trees, saplings, poles, or wands are planted, also monitor in year 10 after planting;	
WET-2: Construct cofferdams of clean, river-run gravel; unless flows are less than 50 cfs, install cofferdams no earlier than May and remove in Oct; fill plunge pool staging area with spawning size gravel, cover with visqueen liner and a layer of crushed rock or sand; remove surface layer and liner when construction is complete; to minimize loss of wetlands and riparian vegetation, upgrade plunge pool access road to a one lane, two-way road with turnouts. Implement revegetation immediately after completion of Phase 1 construction; create or restore riparian and fringe palustrine wetlands similar in function at 3:1 ratio; grade as necessary; under	Monitor compliance with measures in Appendix U and report to CDFG, USACE, Monterey County, and DWR.  Monitor revegetation plantings and report to USACE, Monterey County, CDFG, and DWR.	Applicant's Environmental Inspector, Hydrologist, or Revegetation Specialist	During construction, conduct monitoring annually on all revegetated areas and areas identified for potential erosion and sedimentation problems.  Monitor and record success of wetland restoration, annually. At end of three years, submit status report to USACE. Report shall include percent cover achieved and will identify all problem areas. If the performance criteria are not met, status reports will be submitted annually until criteria are met.  Monitor replacement plantings	Monterey County, CDFG, CCRWQCB, USFWS, USACE

## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
<p>supervision of a qualified botanist, plant cuttings or seedlings in appropriate habitat; obtain seedlings from Carmel Valley area populations; replant seedlings as necessary to ensure long-term survival. For Other Waters of the U.S., may also improve stream channel habitat on Carmel River upstream of project area or along other appropriate streams in watershed; obtain conservation easement or mitigation banking credits at 3:1 ratio on similar, unaffected and fully functional wetlands in watershed; comply with specifications of the USACE 404 permit; implement provisions in the Botanical Resources Management Plan (Appendix U).</p>			<p>during years 1, 2, 3, and 5 following planting; for areas where trees, saplings, poles, or wands are planted, also monitor in year 10 after planting; implement monitoring immediately following planting; monitor during years 1,2,3, and 5 following planting; for areas in which trees, saplings, poles, wands, or acorns are planted, also monitor in year 10 following planting.</p>	
<p><b>WET-3:</b> Implement erosion and sedimentation control BMPs in SWPPP (Appendix K) for all grading, filling, vegetation clearing or excavating; design road widening to avoid placing fill above canyon walls; with a qualified hydrologist, design all road widening and improvements to avoid or minimize alteration of existing drainage patterns; employ appropriate erosion control technology; conduct construction work during dry season; avoid excavation and operation of construction vehicles within tree driplines; implement dust control measures including watering unpaved access roads; with qualified revegetation specialist, revegetate disturbed areas with seed mix containing as high a percentage of</p>	<p>Monitor compliance with measures in Appendix U and report to CDFG, USACE, Monterey County, and DWR.</p> <p>Monitor compliance with erosion and sedimentation control BMPs in Appendix K and report to Monterey County, CDFG, USACE, CCRWQCB, and DWR.</p>	<p>Applicant's Environmental Inspector, Hydrologist, or Revegetation Specialist</p>	<p>Report compliance with measures in Appendix U as specified in Botanical Resources Management Plan.</p> <p>Throughout construction, for erosion control, water quality protection and in temporary and permanent revegetated areas inspect as follows: inspect daily in areas under active construction or equipment operation, weekly in areas with no active construction or equipment operation, in all areas within 24-hours of each 0.5 inch or greater rainfall event, soil and weather conditions permitting.</p> <p>Environmental Inspector shall</p>	<p>Monterey County, CDFG, CCRWQCB, USFWS, USACE</p>

## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
<p>native seeds as possible; implement remedial actions if revegetation is unsuccessful or if significant erosion and sedimentation is observed during monitoring; implement strategies in Botanical Resources Management Plan (Appendix U).</p>			<p>document all inspections in Environmental Daily Inspection Report. Reports of daily inspections will be submitted monthly to the agencies.</p> <p>Verbally report noncompliance within 24 hours from time applicant is first aware of the circumstance and submit written report within 5 days. Reports will be made to the appropriate agency identified in the SWPPP and SPCC (Appendices K and R), to the U.S. EPA Emergency Response Branch and the CCRWQCB.</p>	
<p><b>4.7 Air Quality</b></p> <p><b>AQ-1:</b> To minimize, all active construction areas and access roads will be watered at least twice daily. All grading will be prohibited during winds greater than 15 mph. Chemical soil stabilizers will be applied to disturbed construction areas that have been unused for at least four consecutive days. Non-toxic binders will be applied to exposed areas after cut and fill operations and to hydroseeded areas. Haul trucks will maintain at least 2 feet of freeboard. All trucks hauling dirt, sand, or loose materials will be covered. Disturbed areas will be seeded or planted with a vegetative ground cover as soon as possible. Inactive storage piles will be covered with tarps. A sign will be posted giving the telephone number and person to</p>	<p>Monitor compliance with measures to reduce emissions from construction equipment and road dust and report to the MBUAPCD and DWR.</p>	<p>Applicant's Environmental Inspector, MBUAPCD monitoring stations</p>	<p>Monitoring will occur daily, during construction. Monthly reports will be submitted to the MBUAPCD throughout construction.</p>	<p>MBUAPCD</p>

## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
<p>contact regarding dust complaints. This person would respond to complaints and take corrective action within 48 hours. The phone number of the Monterey Bay Unified Air Pollution Control District (MBUAPCD) would be visible to ensure compliance with Rule 402 (Nuisance).</p> <p>Even with implementation of these measures, the impact will remain significant and unavoidable.</p>				
<p><b>AQ-2:</b> To minimize, crushed rock will be used as a final base on unpaved roads. Unpaved or unrocked roads, parking areas, and staging areas will be watered. The amount and frequency of water application would be adjusted for weather conditions to maintain a minimum average soil moisture ratio of 5, for 95 percent or greater dust suppression. Water quality BMPs will be implemented to avoid introducing sediment into the river and creeks. Non-toxic chemical stabilizers or dust suppressants will be applied to unpaved haul roads. As traffic and weather allow, as necessary, a street sweeper will be regularly used to prevent sediment accumulation on paved roads. A 15-mph speed limit will be enforced on all vehicles on unpaved haul roads. The Applicant will implement practical and cost-effective PM<sub>10</sub> controls for access roads, including paving and coarse graveling, in addition to periodic watering, along with practical and cost-</p>	<p>Monitor compliance with measures to reduce dust and other emissions during access road improvements and report to the MBUAPCD and DWR.</p>	<p>Applicant's Environmental Inspector, MBUAPCD monitoring stations</p>	<p>Monitoring will occur daily, during construction. Monthly reports will be submitted to the MBUAPCD throughout construction.</p>	<p>MBUAPCD</p>

## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
<p>effective NO<sub>x</sub> controls for diesel vehicles and equipment, such as Viscon18. To the maximum extent possible, state-certified construction equipment in the PERP, pre-approved for use in any district by the Air Resources Board, will be used. The Applicant will comply with all MBUAPCD permit requirements. Even with implementation of these measures, the impact will remain significant and unavoidable.</p>				
<p><b>AQ-3:</b> To minimize, crushed rock will be used as a final base on unpaved service roads to minimize dust generation in the vicinity of the Sleepy Hollow subdivision, and to make the roads more drivable. Unpaved or unrocked roads, parking areas, staging areas and the batch plant will be watered. The amount and frequency of water application will be adjusted for weather conditions to maintain a minimum average soil moisture ratio of 5, for 95 percent or greater dust suppression. Water quality BMPs will be implemented to avoid introducing sediment into the river and creeks. Non-toxic chemical stabilizers or dust suppressants will be applied to unpaved haul roads. As traffic and weather allow, a municipal street sweeper will be used to prevent accumulation on Center Court Place and affected portions of San Clemente Drive. A 15-mph speed limit will be enforced on all unpaved haul roads.</p>	<p>Monitor compliance with measures to reduce dust and other emissions during project-related travel, and report to the MBUAPCD and DWR.</p>	<p>Applicant's Environmental Inspector, MBUAPCD monitoring stations</p>	<p>Monitoring will occur daily, during construction. Monthly reports will be submitted to the MBUAPCD throughout construction.</p>	<p>MBUAPCD</p>

## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
<p>The Applicant will implement practical and cost-effective PM<sub>10</sub> controls for access roads, including paving and coarse graveling, in addition to periodic watering, along with practical and cost-effective NO<sub>x</sub> controls for diesel vehicles and equipment, such as Viscon 18. To the maximum extent possible, state-certified construction equipment in the PERP, pre-approved for use in any district by the Air Resources Board, will be used. The Applicant will comply with all MBUAPCD permit requirements. Even with implementation of these measures, the impact will remain significant and unavoidable.</p>				
<b>4.8 Noise</b>				
<p><b>NO-1:</b> To minimize, limit operations to daytime working hours. Even with implementation of this measure, the impact will remain significant and unavoidable.</p>	<p>Monitor compliance with daytime working hours restriction and report to Monterey County and DWR.</p>	<p>Applicant's Environmental Inspector</p>	<p>Monitoring will occur daily, during construction. Quarterly reports will be submitted to the County throughout construction.</p>	<p>Monterey County</p>
<p><b>NO-2:</b> To minimize, use quiet design construction equipment; install enclosure panels when required on stationary equipment; eliminate unnecessary idling; implement good maintenance and lubrication procedures; implement timing restrictions such as limiting operations to daytime working hours; limit construction worker passenger vehicle access during construction season to Monday-Saturday, 7:00 a.m.-7:00 p.m.</p>	<p>Monitor compliance with measures to reduce noise generated during access road improvements and report to Monterey County and DWR.</p>	<p>Applicant's Environmental Inspector</p>	<p>Monitoring will occur daily, during construction. Quarterly reports will be submitted to the County throughout construction.</p>	<p>Monterey County</p>

## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
and truck deliveries of construction materials to Monday-Saturday between 8:00 a.m. and 6:00 p.m.; enforce California Vehicle Code prohibitions against faulty or modified loud exhaust systems; enforce reduced speed limits to 15 mph on unpaved roads. Even with implementation of these measures, the impact will remain significant and unavoidable.				
<b>NO-3:</b> To minimize, use quiet design construction equipment; install enclosure panels when required on stationary equipment; eliminate unnecessary idling; implement good maintenance and lubrication procedures; implement timing restrictions, such as limiting operations to daytime working hours; limit construction worker passenger vehicle access during construction season to Monday-Saturday, 7:00 a.m.-7:00 p.m. and truck deliveries of construction materials to Monday-Saturday between 8:00 a.m. and 6:00 p.m.; enforce California Vehicle Code prohibitions against faulty or modified loud exhaust systems; enforce reduced speed limits to 15 mph on unpaved roads. Even with implementation of these measures, the impact will remain significant and unavoidable.	Monitor compliance with measures to reduce noise from construction-related travel including travel associated with mobilization, materials, and workers, and report to Monterey County and DWR.	Applicant's Environmental Inspector	Monitoring will occur daily, during construction. Quarterly reports will be submitted to the County throughout construction.	Monterey County
<b>4.9 Traffic and Circulation</b>				
<b>TC-1:</b> To minimize, implement trip	Monitor compliance with	Traffic/Transportation	Monitoring will occur daily, during	Monterey County Public



## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
<p>reduction plan for construction workers including use of an off-site park and ride area; prepare Traffic Coordination and Communication Plan to define specific schedules for truck deliveries and worker shifts to avoid peak commute and school bus traffic; use resident</p> <p>Traffic/Transportation Coordinator; prepare and implement Traffic Safety Plan to address vehicle size and speed, coordinate travel routes, coordinate with emergency response entities, determine need for flag persons and traffic and speed limit signs. Develop vehicle and driver inspection program, prepare Construction Management Plan per Monterey County Public Works</p> <p>Department specifications that would reduce the number of project-related vehicles, reduce interaction between construction and other vehicles, and promote public safety. During periods when double-trailer trucks are used, flagging personnel will direct traffic at the Carmel Valley Road/Cachagua Road intersection; the Traffic Control Plan will include Carmel Valley Road between Carmel Village and Cachagua Road and the Cachagua Road and the Jeep Trail; to assist with traffic control and ingress and egress, transport trucks will be escorted when traveling between Carmel Valley Road and the Jeep Trail; at some locations on Cachagua Road opposing traffic</p>	<p>measures to reduce impacts related to having additional traffic on the area road network and report to the Monterey County Public Works Department and DWR.</p>	<p>Coordinator</p>	<p>construction. Quarterly reports will be submitted to the County throughout construction.</p>	<p>Works Department</p>

## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
<p>will be stopped to facilitate haul operations; traffic impact fees will be paid to Monterey County.</p> <p>Even with implementation of these measures, the impact will remain significant and unavoidable.</p>				
<p><b>TC-3a:</b> Implement trip reduction plan for construction workers including use of an off-site park and ride area; prepare Traffic Coordination and Communication Plan; prohibit night and weekend truck deliveries; restrict delivery of major items to weekdays between 0800 and 1500; avoid peak commute and school bus traffic; use resident Traffic/Transportation Coordinator; prepare and implement Traffic Safety Plan to address vehicle size and speed, coordinate travel routes, coordinate with emergency response entities, and to determine need for flag persons and traffic and speed limit signs; post flagging personnel when double-trailer trucks are used. Develop vehicle and driver inspection program, prepare Construction Management Plan per Monterey County Public Works Department specifications to reduce the number of project-related vehicles, reduce interaction between construction and other vehicles, and promote public safety. Widen Cachagua Road. Pay traffic impact fee to Monterey County; coordinate with Monterey County Public Works Department to fund enforcement to</p>	<p>Monitor compliance with measures to reduce the potential for increased accident rates on Carmel Valley Road and report to the Monterey County Public Works Department and DWR.</p>	<p>Traffic/Transportation Coordinator</p>	<p>Monitoring will occur daily, during construction. Quarterly reports will be submitted to the County throughout construction; reports to the County, quarterly.</p>	<p>Monterey County Public Works Department</p>

## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
<p>monitor speed and truck inspections.</p> <p><b>TC-3b:</b> To minimize, implement trip reduction plan for construction workers including use of off-site park and ride area; prepare Traffic Coordination and Communication Plan to schedule truck deliveries and worker shifts to avoid peak commute and school bus traffic; use resident Traffic/ Transportation Coordinator; prepare and implement Traffic Safety Plan to address vehicle size and speed, coordinate travel routes, coordinate with emergency response entities, determine need for flag persons and traffic and speed limit signs; develop vehicle and driver inspection program; prepare Construction Management Plan per Monterey County Public Works Department specifications to reduce the number of project-related vehicles, reduce interaction between construction and other vehicles, and promote public safety. Pay traffic impact fee to Monterey County.</p> <p>Even with implementation of these measures, the impact will remain significant and unavoidable.</p>	<p>Monitor compliance with measures to reduce the potential for increased accident rates on San Clemente Drive and report to the Monterey County Public Works Department and DWR.</p>	<p>Traffic/Transportation Coordinator</p>	<p>Daily, during construction. Submit reports to the County, quarterly.</p>	<p>Monterey County Public Works Department</p>
<p><b>TC-4:</b> Increase sight distance looking east from Cachagua Road by constructing improvements at Carmel Valley Road/Cachagua Road intersection; lengthen sight distance looking east by relocating stop bar on Cachagua Road approach to Carmel Valley Road; perform physical</p>	<p>Monitor compliance with measures to reduce the inadequate visual sight distance at intersections potential and report to the Monterey County Public Works Department and DWR.</p>	<p>Traffic/Transportation Coordinator</p>	<p>Monitoring will occur daily, during construction. Quarterly reports will be submitted to the County throughout construction.</p>	<p>Monterey County Public Works Department</p>

## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
<p>Improvements at intersection such as regrading embankment on south side of Carmel Valley Road east of Cachagua Road; construct Jeep Trail intersection to increase sight distance looking north from Jeep Trail approach; improve sight distance by lowering embankment elevation on east side of Cachagua Road north of the Jeep Trail or by relocating the intersection of Jeep Trail to increase the sight distance looking north.</p>				
<p>TC-6: To minimize, implement a trip reduction plan for construction workers including use of off-site park and ride area; prepare Traffic Coordination and Communication plan to schedule truck deliveries and worker shifts to avoid peak commute and school bus traffic; use a resident Traffic/Transportation Coordinator; prepare and implement a traffic safety plan to address vehicle size and speed, coordinate travel routes, coordinate with emergency response entities, determine need for flag persons and traffic and speed limit signs. Develop vehicle and driver inspection program, prepare a Construction Management Plan per Monterey County Public Works Department specifications to reduce the number of project-related vehicles, reduce interaction between construction and other vehicles, and promote public safety. Pay a traffic impact fee to Monterey County.</p>	<p>Monitor compliance with measures to reduce the effect of increased traffic on residential neighborhoods and report to the Monterey County Public Works Department and DWR.</p>	<p>Traffic/Transportation Coordinator</p>	<p>Monitoring will occur daily, during construction. Quarterly reports will be submitted to the County throughout construction.</p>	<p>Monterey County Public Works Department</p>

## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
Even with implementation of these measures, the impact will remain significant and unavoidable.				
TC-7: Prior to construction, coordinate with local agencies to determine which roads are best to use; restore affected roads to pre-project condition immediately after construction is complete.	Coordinate with Monterey County Public Works Department and formally report to them concerning the best roads to use. After construction, coordinate with the Monterey County Public Works Department to immediately restore roads to pre-project conditions.	Traffic/Transportation Coordinator	Coordinate with, and report to the Monterey County Public Works Department before and post-construction.	Monterey County Public Works Department
<b>4.10 Cultural Resources</b>				
CR-1: Complete National Historic Preservation Act Section 106 process; monitor construction activities at known archaeological sites; if complete avoidance of sites isn't possible during construction and maintenance, conduct complete archaeological evaluation and historical documentation of sites; if historic properties are discovered, avoid, minimize or mitigate impacts; if buried cultural resources are discovered, halt construction operations and contact federal lead agency; implement an archaeological monitoring program consisting of: preconstruction assessment and construction training, construction monitoring, site recording and evaluation, mitigation planning, curation, tribal discussion, report of findings, and review and approval of	Monitor compliance with measures to reduce the effect of ground disturbance on archaeological sites and report to the SHPO and DWR.	Applicant	Monitor throughout construction, submit reports to the SHPO according to the Section 106 MOA.	California State Parks Office of Historic Preservation/State Historic Preservation Officer

## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
any erosion control or revegetation procedures in the vicinity of a known significant site prior to implementing procedures.				
CR-2: Use rigid support of structures to minimize ground movement.	Monitor compliance with measures to reduce damage to historic structures due to construction-related vibrations and report to the SHPO and DWR.	Applicant	Monitor throughout construction, submit reports to the SHPO according to the Section 106 MOA.	California State Parks Office of Historic Preservation/State Historic Preservation Officer
CR-3: Implement dust reduction measures including: spraying water on ground surface prior to ground disturbance; use crushed rock as final base for unpaved service roads; use watering trucks and adequate water on unpaved areas; enforce 15 mph speed limit on unpaved haul roads; implement other PM10 reduction BMPs; adopt Air Quality dust reduction BMPs; adhere to permit conditions.	Monitor compliance with measures to reduce introduction of dirt, or to cause unintended damage to historic structures during construction-related and demolition activities and report to the SHPO and DWR.	Applicant	Monitor before, during and post-construction. Submit reports to the SHPO according to the Section 106 MOA. Air quality/dust control monitoring will occur daily, during construction. Monthly reports will be submitted to the MBUAPCD throughout construction.	California State Parks Office of Historic Preservation/State Historic Preservation Officer, MBUAPCD
CR-4: To minimize, complete Section 106 process including recordation of OCRD and associated fish ladder and SCD and associated fish ladder in the form of NPS regulated HABS/HAER level documentation prior to any construction; additional measures could include interpretive displays, development of an educational program on the facilities and a professional publication on the historic resources. Even with implementation of these measures, the impact will remain	Monitor compliance with measures to reduce impacts associated with demolition of the OCRD and fish ladder (historic properties), and demolition activities and report to the SHPO and DWR.	Applicant	Monitor during and post-construction. Submit reports to the SHPO according to the Section 106 MOA.	California State Parks Office of Historic Preservation/State Historic Preservation Officer

## MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	MONITORING OR REPORTING ACTION	MONITORING OR REPORTING ENTITY	TIMING	ENFORCEMENT ENTITY
significant and unavoidable.				
<b>CR-5:</b> To minimize, prepare NRHP nomination form for Historic District, complete Historic Preservation Management Plan, complete 106 process and MOA. Even with implementation of these measures, the impact will remain significant and unavoidable.	Monitor compliance with measures to reduce impacts associated with altering the character of the San Clemente Dam Historic Resource District and report to the SHPO and DWR.	Applicant	Monitor during and post-construction. Submit reports to the SHPO according to the Section 106 MOA.	California State Parks Office of Historic Preservation/State Historic Preservation Officer
<b>CR-6:</b> To minimize, prior to construction, complete photographic documentation; use design, materials, and construction methods that are compatible with the existing historic resources. Even with implementation of these measures, the impact will remain significant and unavoidable.	Monitor compliance with measures to reduce impacts associated with loss of visual integrity of the San Clemente Dam Historic Resource District and report to the SHPO and DWR.	Applicant	Monitor before and during construction. Submit reports to the SHPO according to the Section 106 MOA.	California State Parks Office of Historic Preservation/State Historic Preservation Officer
<b>4.12 Recreation</b>				
<b>REC-2:</b> To minimize, operation of heavy earth-moving equipment and other construction equipment would occur during normal working hours. Air quality, noise and traffic mitigations described in Sections 4.7.3, 4.8.3 and 4.9.3 in the Final EIR/EIS will also be implemented to minimize disruption of the use of the Jeep Trail. Even with implementation of these measures, the impact will remain significant and unavoidable.	Monitor compliance with measures to reduce impacts to air, noise, and traffic associated with heavy equipment use of the Jeep Trail and report to Monterey County, the MBUAPCD, and DWR.	Applicant and Applicant's Environmental Inspector	Air Quality monitoring will occur daily, during construction, and will be reported monthly to the MBUAPCD throughout construction. Noise and traffic monitoring will occur daily, during construction. Quarterly reports will be submitted to the County throughout construction.	Monterey County and MBUAPCD

THIS PAGE INTENTIONALLY LEFT BLANK

San Clemente Dam  
Seismic Safety Project  
March 2011